Exhibit 58 to the Olivia Weber Declaration

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549
Form 10-K

(MARK ONE)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended November 3, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Broadcom Inc.

Delaware	1320 Ridder Park Drive San Jose, CA 95131-2313 (408) 433-8000	001-38449	35-2617337
(State or Other Jurisdiction of Incorporation or Organization)	(Exact Name of Registrant as Specified in Its Charter Address of Principal Executive Offices Registrant's Telephone Number, Including Area Code)	(Commission File Number)	(I.R.S. Employer Identification No.)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, $0.001 par value	AVGO	The NASDAQ Global Select Market
8.00% Mandatory Convertible Preferred Stock, Series A, $0.001 par value	AVGOP	The NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	Accelerated filer	Non-accelerated filer (Do not check if a smaller reporting company)	Smaller reporting company	Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of voting and non-voting common equity held by non-affiliates as of May 3, 2019, based upon the closing sale price of such shares on The Nasdaq Global Select Market on such date was approximately $122.7 billion.

As of November 29, 2019, the registrant had 397,792,289 shares of its common stock, $0.001 par value per share, outstanding.

Documents Incorporated by Reference

Information required in response to Part III of this Annual Report on Form 10-K is hereby incorporated by reference from the registrant's definitive Proxy Statement for its 2020 Annual Meeting of Stockholders. Except as expressly incorporated by reference, the registrant's Proxy Statement shall not be deemed to be a part of this Annual Report on Form 10-K. The registrant intends to file its definitive Proxy Statement within 120 days after its fiscal year ended November 3, 2019.

BROADCOM INC.
2019 ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

PART I

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws and particularly in Item 1: “Business,” Item 1A: “Risk Factors,” Item 3: “Legal Proceedings” and Item 7: “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Annual Report on Form 10-K. These statements are indicated by words or phrases such as “anticipate,” “expect,” “estimate,” “seek,” “plan,” “believe,” “could,” “intend,” “will,” and similar words or phrases. These forward-looking statements may include projections of financial information; statements about historical results that may suggest trends for our business; statements of the plans, strategies, and objectives of management for future operations; statements of expectation or belief regarding future events (including any acquisitions we may make), technology developments, our products, product sales, expenses, liquidity, cash flow and growth rates, or enforceability of our intellectual property rights; and the effects of seasonality on our business. Such statements are based on current expectations, estimates, forecasts and projections of our industry performance and macroeconomic conditions, based on management’s judgment, beliefs, current trends and market conditions, and involve risks and uncertainties that may cause actual results to differ materially from those contained in the forward-looking statements. We derive most of our forward-looking statements from our operating budgets and forecasts, which are based upon many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Accordingly, we caution you not to place undue reliance on these statements. Important factors that could cause actual results to differ materially from our expectations are disclosed under “Risk Factors” in Part I, Item 1A of this Annual Report on Form 10-K. These factors include risks associated with: our acquisition of Symantec Corporation’s Enterprise Security business (“Symantec Business”), including (1) potential difficulties in employee retention, (2) unexpected costs, charges or expenses, and (3) our ability to successfully integrate the Symantec Business and achieve the anticipated benefits of the transaction; any loss of our significant customers and fluctuations in the timing and volume of significant customer demand; our dependence on contract manufacturing and outsourced supply chain; our dependency on a limited number of suppliers; global economic conditions and concerns; international political and economic conditions; any acquisitions we may make, such as delays, challenges and expenses associated with receiving governmental and regulatory approvals and satisfying other closing conditions, and with integrating acquired companies with our existing businesses and our ability to achieve the growth prospects and synergies expected by such acquisitions, including our recent acquisition of the Symantec Business; government regulations and trade restrictions; our significant indebtedness, including the additional indebtedness that we incurred in connection with the Symantec Business acquisition and the need to generate sufficient cash flows to service and repay such debt; dependence on and risks associated with distributors and resellers of our products; dependence on senior management and our ability to attract and retain qualified personnel; involvement in legal and administrative proceedings; quarterly and annual fluctuations in our operating results; our ability to accurately estimate customers’ demand and adjust our manufacturing and supply chain accordingly; cyclicality in the semiconductor industry or in our target markets; our competitive performance and ability to continue achieving design wins with our customers, as well as the timing of any design wins; prolonged disruptions of our or our contract manufacturers' manufacturing facilities or other significant operations; our ability to improve our manufacturing efficiency and quality; our dependence on outsourced service providers for certain key business services and their ability to execute to our requirements; our ability to maintain or improve gross margin; our ability to protect our intellectual property and the unpredictability of any associated litigation expense; compatibility of our software products with operating environments, platforms or third-party products; our ability to enter into satisfactory software license agreements; sales to our government clients; availability of third party software used in our products; use of open source code sources in our products; any expense or reputational damage associated with resolving customer product warranty and indemnification claims; market acceptance of the end products into which our products are designed; our ability to sell to new types of customers and to keep pace with technological advances; our compliance with privacy and data security laws; our ability to protect against a breach of security systems; changes in accounting standards; fluctuations in foreign exchange rates; our provision for income taxes and overall cash tax costs, legislation that may impact our overall cash tax costs and our ability to maintain tax concessions in certain jurisdictions; and other events and trends on a national, regional and global scale, including those of a political, economic, business, competitive and regulatory nature. All of the forward-looking statements in this Annual Report on Form 10-K are qualified in their entirety by reference to the factors listed above and those discussed under the heading “Risk Factors” in Part I, Item 1A of this Annual Report on Form 10-K. We caution you that the foregoing list of important factors may not contain all of the material factors that are important to you. In addition, in light of these risks and uncertainties, the matters referred to in the forward-looking statements contained in this Annual Report on Form 10-K may not in fact occur. We undertake no intent or obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as otherwise required by law.

Financial information and results of operations presented relate to (1) Broadcom Inc. for the periods after April 4, 2018, (2) Broadcom Limited, our predecessor, for the period from February 1, 2016 to April 4, 2018, and (3) Avago Technologies Limited, predecessor to Broadcom Limited, for periods prior to February 1, 2016. Similarly, unless stated otherwise or the context otherwise requires, references to “Broadcom,” “we,” “our” and “us” mean Broadcom Inc. and its consolidated subsidiaries after April 4, 2018 and, prior to that time, our predecessors. Our fiscal year ends on the Sunday closest to October 31 in a 52-week year and the first Sunday in November in a 53-week year. We refer to our fiscal years by the calendar year in which they end. For example, the fiscal year ended November 3, 2019 is referred to as “fiscal year 2019”, and was a 52-week year.

ITEM 1. BUSINESS

Overview

Broadcom Inc. ("Broadcom") is the successor to Broadcom Pte. Ltd. (formerly Broadcom Limited), a Singapore company ("Broadcom-Singapore"), as a result of our redomiciliation to the United States on April 4, 2018 (the "Redomiciliation Transaction"). We are a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. Our over 50-year history of innovation dates back to our diverse origins from Hewlett-Packard Company, AT&T, LSI Corporation, Broadcom Corporation ("BRCM"), Brocade Communications Systems LLC ("Brocade"), CA, Inc. ("CA") and Symantec Corporation. Over the years, we have assembled a large team of semiconductor and software design engineers around the world. We maintain design, product and software development engineering resources at locations in the U.S., Asia, Europe and Israel, providing us with engineering expertise worldwide. We strategically focus our research and development resources to address niche opportunities in our target markets and leverage our extensive portfolio of U.S. and other patents, and other intellectual property ("IP") to integrate multiple technologies and create system-on-chip ("SoC") component and software solutions that target growth opportunities. We design products and software that deliver high-performance and provide mission-critical functionality.

We develop semiconductor devices with a focus on complex digital and mixed signal complementary metal oxide semiconductor ("CMOS") based devices and analog III-V based products. We have a history of innovation in the semiconductor industry and offer thousands of products that are used in end products such as enterprise and data center networking, home connectivity, set-top boxes, broadband access, telecommunication equipment, smartphones and base stations, data center servers and storage systems, factory automation, power generation and alternative energy systems, and electronic displays. We differentiate ourselves through our high performance design and integration capabilities and focus on developing products for target markets where we believe we can earn attractive margins.

Our infrastructure software solutions enable customers to plan, develop, automate, manage, and secure applications across mainframe, distributed, mobile, and cloud platforms. Many of the largest companies in the world, including most of the Fortune 500 and many government agencies, rely on our enterprise and mainframe software to help manage and secure their on-premise and hybrid cloud environments. Our portfolio of mainframe and enterprise software solutions enables customers to leverage the benefits of agility, automation, insights and security in managing business processes and technology investments. We also offer mission critical fibre channel storage area networking ("FC SAN") products and related software in the form of modules, switches and subsystems incorporating multiple semiconductor products. Following the acquisition of Symantec's Enterprise Security business, we also offer a cybersecurity solutions portfolio, including data loss prevention, endpoint protection, and web, email and cloud security solutions.

Recent Developments

Acquisition of Symantec's Enterprise Security Business

On November 4, 2019, we completed the purchase of certain assets and assumed certain liabilities of the Symantec Corporation (now known as NortonLifeLock Inc.) Enterprise Security business (the "Symantec Business") for approximately $10.7 billion in cash, on a cash-free, debt-free basis (the "Symantec Asset Purchase"), subject to delayed closings in certain non-U.S. jurisdictions, in accordance with the terms of the Asset Purchase Agreement (as amended or supplemented) we entered into with Symantec on August 8, 2019. The addition of the Symantec Business significantly expands our infrastructure software solutions as we continue to build one of the world's leading infrastructure technology companies.

The Symantec Business is an established leader in cybersecurity. We acquired the Symantec Business to expand our footprint of mission critical infrastructure software with our existing customer base. The Symantec Business includes a deep and broad mix of products, services and solutions, unifying cloud and on-premises security to provide advanced threat protection and information protection across endpoints, network, email and cloud applications. The key components of the Symantec Business include:

Data Loss Prevention: Data access governance, activity monitoring, threat detection, and remediation solutions that enable security access to cloud applications.

Endpoint Protection: A single agent architecture that delivers multi-layered security across endpoints - desktop, server, mobile and Internet of Things ("IoT") - and enables customers to protect enterprise and mobile workforces, regardless of operating system, device or network security approaches.

Network Security: Cloud and on-premises network security solutions, based on an advanced proxy architecture, that provide superior defense against advanced threats, enable users to protect critical business information, and help ensure secure and compliant use of cloud applications and the web.

Email Security: Multiple layers of protection (including threat isolation and advanced analytics) against ransomware, spear phishing, and enterprise email compromise that help to identify targeted attacks and enable users to protect email against user error and data leakage.

Cloud Application Security: Advanced solutions that secure cloud access, cloud infrastructure, and cloud applications, providing in-depth visibility, data security, and threat protection to safeguard users, information and workloads across public and private clouds.

Acquisition of CA, Inc.

On November 5, 2018, we acquired CA for approximately $18.8 billion in cash and assumed $2.25 billion of outstanding unsecured bonds (the "CA Merger"). We financed the CA Merger with $18 billion in new term loans, as well as cash on hand of the combined companies. We also assumed all eligible unvested CA equity awards in the transaction.

Following the CA Merger, we sold Veracode, Inc., a subsidiary of CA and provider of application security testing solutions, to Thoma Bravo, LLC for an aggregate purchase price of $950 million.

Segment Reporting

We updated our organizational structure for the fiscal year ended November 3, 2019 ("fiscal year 2019"), resulting in three reportable segments: semiconductor solutions, infrastructure software and IP licensing. Beginning with the fiscal year ending November 1, 2020, we will have two reportable segments: semiconductor solutions and infrastructure software. Each segment represents a component for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker in determining how to allocate resources and evaluate performance. The reportable segments are determined based on several factors including, but not limited to, customer base, homogeneity of products, technology, delivery channels and similar economic characteristics.

Our semiconductor solutions segment will continue to include all of our semiconductor solution product lines, as well as our IP licensing. Our infrastructure software segment will include our mainframe and enterprise software solutions, our FC SAN business and the Symantec Business.

See discussion in the "Results of Operations" section included in Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations* and Note 12. "Segment Information" included in Part II, Item 8. *Financial Statements and Supplementary Data,* of this Annual Report on Form 10-K for additional segment information. For fiscal year 2019, net revenue included contributions from CA commencing on November 5, 2018, which are included in the infrastructure software segment. For the fiscal year ended November 4, 2018 ("fiscal year 2018"), net revenue included contributions from Brocade commencing on November 17, 2017, which are primarily included in the infrastructure software segment. *All discussions and information in this Annual Report on Form 10-K regarding our business and financial results relate solely to our operations prior to the Symantec Asset Purchase, unless otherwise indicated.*

Business Strategy

Our strategy is to combine best-of-breed technology leadership in semiconductor and infrastructure software solutions, with unmatched scale, on a common sales and administrative platform to deliver a comprehensive suite of infrastructure technology products to the world's leading business and government customers. We seek to achieve this through responsibly financed acquisitions of category-leading businesses and technologies, as well as investing extensively in research and development, to ensure our products retain their technology leadership. This strategy results in a robust business model designed to drive diversified and sustainable operating and financial results.

Products and Markets

Semiconductor Solutions

Semiconductors are made by imprinting a network of electronic components onto a semiconductor wafer. These devices are designed to perform various functions such as processing, amplifying and selectively filtering electronic signals, controlling electronic system functions and processing, and transmitting and storing data. Our digital and mixed signal products are based on silicon wafers with CMOS transistors offering fast switching speeds and low power consumption, which are both critical design factors for the markets we serve. We also offer analog products, which are based on III-V semiconductor materials that have higher electrical conductivity than silicon, and thus tend to have better performance characteristics in radio frequency ("RF"), and optoelectronic applications. III-V refers to elements from the 3rd and 5th groups in the periodic table of chemical elements. Examples of these materials used in our products are gallium arsenide ("GaAs") and indium phosphide, ("InP").

We provide semiconductor solutions for managing the movement of data in data center, telecom, enterprise, and embedded networking applications. We provide a broad variety of RF semiconductor devices, wireless connectivity solutions and custom touch controllers for mobile applications. We also provide semiconductor solutions for enabling the set-top box and broadband access markets and for enabling secure movement of digital data to and from host machines, such as servers, personal computers and storage systems, to the underlying storage devices, such as hard disk drives and solid state drives. We also provide a broad variety of products for the general industrial and automotive markets.

Our product portfolio ranges from discrete devices to complex sub-systems that include multiple device types and may also incorporate firmware for interfacing between analog and digital systems. In some cases, our products include mechanical hardware that interfaces with optoelectronic or capacitive sensors. We focus on markets that require high quality and the technology leadership and integrated performance characteristic of our products. The table below presents our major semiconductor product families and their major applications during fiscal year 2019.

Major Applications	Major Product Families
• Set-top Box (“STB”) and Broadband Access	• STB SoCs
	• Cable, digital subscriber line (“DSL”) and passive optical networking (“PON”) central office/consumer premise equipment (“CO/CPE”) SoCs
	• Wireless local area network (“WLAN”) access point SoCs
• Data center, Telecom, Enterprise and Embedded Networking	• Ethernet switching and routing application specific standard product (“ASSP”)
	• Embedded processors and controllers
	• Serializer/Deserializer (“SerDes”), application specific integrated circuits (“ASICs”)
	• Optical and copper, physical layer (“PHYs”)
	• Fiber optic transmitter and receiver components
• Mobile handsets	• RF front end modules (FEMs), filters, power amplifiers
	• Wi-Fi, Bluetooth, global positioning system/global navigation satellite system (“GPS/GNSS”) SoCs
	• Custom touch controllers
• Servers and storage systems	• Serial attached small computer system interface (“SAS”) and redundant array of independent disks (“RAID”) controllers and adapters
	• Peripheral component interconnect express (“PCIe”) switches
	• Fibre channel host bus adapters (“HBA”)
• Hard disk drives (“HDD”); Solid state drives (“SSD”)	• Read channel based SoCs; Custom flash controllers
	• Preamplifiers
• Power isolation, power conversion and renewable energy systems	• Optocouplers
• Factory automation, in-car infotainment and renewable energy systems	• Industrial fiber optics
• Motor controls and factory automation	• Motion control encoders and subsystems
• Displays and lighting	• Light emitting diode (“LEDs”)

Set-Top Box Solutions: We offer complete SoC platform solutions for cable, satellite, Internet Protocol television, over-the-top and terrestrial STBs. Our products enable global service providers to introduce new and enhanced technologies and services in STBs, including transcoding, digital video recording functionality, higher definition video processing, increased networking capabilities, and more tuners to enable faster channel change and more simultaneous recordings. We are also enabling service providers in deploying High Efficiency Video Coding (“HEVC”), a video compression format that is a successor to the H.264/MPEG-4 format. HEVC enables ultra-high definition (“Ultra HD”), services by effectively doubling the capacity of existing networks to deploy new or existing content. Our families of STB solutions support the complete range of resolutions, from standard definition, to high definition, and Ultra HD.

Broadband Access Solutions: We offer complete SoC platform solutions for DSL, cable, PON and WLAN for both CPE and CO deployments. Our CPE devices are used in broadband modems, residential gateways and Wi-Fi access points and routers. Our CO devices, including DSL Access Multiplexer, cable modem termination systems and PON optical line termination medium access controller, are empowering modern operator broadband infrastructure. Our products enable global service providers to continue to deploy next generation broadband access technologies across multiple standards, including G.Fast, data over cable service interface specification, PON and Wi-Fi to provide more bandwidth and faster speeds to consumers.

Ethernet Switching & Routing: Ethernet is a ubiquitous interconnection technology that enables high performance and cost effective networking infrastructure. We offer a broad set of Ethernet switching and routing products that are optimized for data center, service provider network, enterprise network, and embedded network applications. In the data center market, our high capacity, low latency, switching silicon supports advanced protocols around virtualization and multi-pathing. Our Ethernet switching fabric technologies provide the ability to build highly scalable flat networks supporting tens of thousands of servers. Our service provider switch portfolio enables carrier/service provider networks to support a large number of services in the wireless backhaul, access, aggregation and core of their networks. For enterprise networks and embedded ethernet applications, we offer product families that combine multi-layer switching capabilities and support lower power modes that comply with industry standards around energy efficient Ethernet.

Embedded Processors & Controllers: Our embedded processors leverage our ARM central processing unit and Ethernet switching technology to deliver SoCs for high performance embedded applications in a wide range of communication products such as voice-over-internet-protocol, telephony, point-of-sale devices and enterprise and retail access points and gateways. We offer a range of knowledge-based processors to enable high-performance decision-making for packet processing in a variety of advanced devices in the enterprise, metro, access, edge and core networking spaces. We also offer a range of Ethernet controllers for servers and storage systems supporting multiple generations of Ethernet technology.

SerDes ASICs: For data center and enterprise networking, and high performance computing applications, we supply high speed SerDes technology integrated into ASICs. These ASICs are custom products built to individual customers specifications. Our ASICs are designed on advanced CMOS process technologies, focused primarily on leading edge geometries.

Physical Layer Devices: These devices, also referred to as PHYs, are transceivers that enable the reception and transmission of Ethernet data packets over a physical medium such as copper wire or optical fibers. Our high performance Ethernet transceivers are built upon a proprietary digital signal processing communication architecture optimized for high-speed network connections and support the latest standards and advanced features, such as energy efficient Ethernet, data encryption and time synchronization. We also offer a range of automotive Ethernet products to meet growing consumer demand for in-vehicle connectivity.

Fiber Optic Components: We supply a wide array of optical components to the Ethernet networking, storage, and access, metro- and long-haul telecommunication markets. Our optical components enable the high speed reception and transmission of data through optical fibers.

RF Semiconductor Devices: Our RF semiconductor devices selectively filter, as well as amplify, RF signals. Filters enable modern wireless communication systems to support a large number of subscribers simultaneously by ensuring that the multiple transmissions and receptions of voice and data streams do not interfere with each other. We were among the first to deliver commercial film bulk acoustic resonator (“FBAR”) filters that offer technological advantages over competing filter technologies, to allow mobile handsets to function more efficiently in today's congested RF spectrum. FBAR technology has a significant market share within the cellular handset market. Our RF products include FEMs that incorporate multiple die into multi-function RF devices, duplexers and multiplexers, which are a combination of two or more transmit and receive filters in a single device, using our proprietary FBAR technology, discrete filters and discrete power amplifiers.

Our expertise in FBAR technology, amplifier design, and module integration enables us to offer industry-leading performance in cellular RF transceiver applications. Our proprietary GaAs wafer manufacturing processes are critical to the production of power amplifier and low noise amplifier products.

Connectivity Solutions: Our connectivity solutions include discrete and integrated Wi-Fi and Bluetooth solutions, and satellite-based GPS/GNSS mobile navigation receivers.

Wi-Fi allows devices on a local area network to communicate wirelessly, adding the convenience of mobility to the utility of high-speed data networks. We offer a family of high performance, low power Wi-Fi chipsets. Bluetooth is a low power technology that enables direct connectivity between devices. We offer a complete family of Bluetooth silicon and software solutions that enable manufacturers to easily and cost-effectively add Bluetooth functionality to virtually any device. These solutions include combination chips that offer integrated Wi-Fi and Bluetooth functionality, which provides significant performance advantages over discrete solutions.

We also offer a family of GPS, assisted-GPS (“A-GPS”) and GNSS semiconductor products, software and data services. These products are part of a broader location platform that leverages a broad range of communications technologies, including Wi-Fi, Bluetooth and GPS, to provide more accurate location and navigation capabilities.

Custom Touch Controllers: Our touch controllers process signals from touch screens in mobile handsets and tablets.

SAS, RAID & PCIe Products: We provide SAS and RAID controller and adapter solutions to server and storage system original equipment manufacturers ("OEMs"). These solutions enable secure and high speed data transmission between a host computer, such as a server, and storage peripheral devices, such as HDD, SSD and optical disk drives and disk and tape-based storage systems. Some of these solutions are delivered as stand-alone semiconductors, typically as a controller. Other solutions are delivered as circuit boards, known as adapter products, which incorporate our semiconductors onto a circuit board with other features. RAID technology is a critical part of our server storage connectivity solutions as it provides protection against the loss of critical data resulting from HDD failures.

We also provide interconnect semiconductors that support the PCI and PCIe communication standards. PCIe is the primary interconnection mechanism inside computing systems today.

Fibre Channel Products: We provide Fibre Channel HBAs, which connect host computers such as servers to FC SANs.

HDD & SSD Products: We provide read channel-based SoCs and preamplifiers to HDD OEMs. These are the critical chips required to read, write and protect data. An HDD SoC is an integrated circuit ("IC") that combines the functionality of a read channel, serial interface, memory and a hard disk controller in a small, high-performance, low-power and cost-effective package. Read channels convert analog signals that are generated by reading the stored data on the physical media into digital signals. In addition, we sell preamplifiers, which are used to amplify the initial signal to and from the drive disk heads so the signal can be processed by the read channel.

We also provide custom flash controllers to SSD OEMs. An SSD stores data in flash memory instead of on a hard disk, providing high speed access to the data. Flash controllers manage the underlying flash memory in SSDs, performing critical functions such as reading and writing data to and from the flash memory and performing error correction, wear leveling and bad block management.

Optocouplers: We offer optical isolators, or optocouplers, which provide electrical insulation and signal isolation for signaling systems that are susceptible to electrical noise or interference. Optocouplers are used in a diverse set of applications, including industrial motors, automotive systems including those used in hybrid engines, power generation and distribution systems, switching power supplies, motion sensors, telecommunications equipment, computers and office equipment, plasma displays, and military electronics.

Industrial Fiber Optics: For industrial networking, we provide robust optical transceivers using plastic optical fiber that enable high-speed and interoperable networking and factory automation.

Motion Encoders: For industrial motors and robotic motion control, we supply optical encoders, as well as ICs for the controller and decoder functions.

LEDs: For electronic signs and signals, we supply LED assemblies that offer high brightness and stable light output over thousands of hours, enabling us to support traffic signals, large commercial signs and other displays.

Infrastructure Software

Our portfolio of mission critical software solutions enables customers to leverage the benefits of agility, automation, insights, resiliency and security in managing business processes and technology investments. Our mainframe software solutions include solutions for the IBM Z® mainframe platform, which runs many of our largest customers' mission critical business applications. These software products help customers improve economics by increasing throughput and lowering cost per transaction, increasing business agility through DevOps tooling and processes, increasing reliability and availability of operations through machine intelligence and automation solutions, and protecting enterprise data with security and compliance.

Our enterprise software solutions enable large global organizations to transform into digital businesses by providing an end-to-end digital infrastructure management platform that delivers speed, agility and the ability to optimize for risk across multi-cloud hybrid environments and workloads. More specifically, these products offer unique solutions that help with application development, testing and deployment, operations and automation, and securing users and access to information technology ("IT") infrastructure and applications. We are able to leverage our core strengths and development efforts to create products and enterprise software solutions that bring new innovation to our mainframe software solutions and vice versa, spanning three strategic portfolios: Agile, DevOps and Security.

We also offer mission critical FC SAN products designed to help customers reduce the cost and complexity of managing business information within a shared data storage environment, enabling high levels of availability of mission critical applications in the form of modules, switches and subsystems incorporating multiple semiconductor products. We deliver reliable and simplified management of these FC SAN products through our software-based management tools designed to maximize uptime, dramatically simplify storage area networking deployment and management, and provide high levels of visibility and insight into the storage network.

The table below presents our software portfolios and their major offerings during fiscal year 2019.

Portfolio	Major Portfolio Offerings
• **Agile** defines how work is planned, executed and serviced to deliver rapid value to our customers, and enables customers to plan, deliver, manage and optimize application development and project management.	• Agile Planning
	• Project & Portfolio Management
• **DevOps** accelerates software delivery, enabling customers to simplify, automate, and make their processes and applications more robust, and provides customers the flexibility to optimize workloads across mobile, cloud, on-premise, and mainframe environments.	• Continuous Delivery
	• Automation
	• Agile Operations
	• Application Programming Interface ("API") Management
• **Security** provides seamless access to the right data designed to minimize the risk of data breaches.	• Application Security
	• Identity & Access Management
	• Payment Security
• **FC SAN Management**	• Fibre Channel switch

Agile Planning: This solution helps customers to collaboratively plan, prioritize and track agile software development at scale using an iterative work cadence that decreases time-to-market, increases product quality and maintains a focus on generating rapid business value.

Project & Portfolio Management: This offering is complementary to Agile Planning, enables customers to collect, prioritize, plan and deliver products, services and customer experiences.

Continuous Delivery: This offering automates the deployment of applications across all stages of their lifecycles enabling the development, testing and release teams to work concurrently and continuously.

Automation: We provide end-to-end automation capabilities that cover service orchestration, workload automation and release automation capabilities, accelerating the entire application delivery process.

Agile Operations: We provide intelligent analytics, comprehensive coverage, and an open, extensible architecture that helps customers correlate end-user, application and infrastructure data from cloud-hosted containers to mainframes.

API Management: This solution facilitates the creation, security and management of APIs through their lifecycle, enabling customers to connect more directly with end-users via mobile apps, cloud platforms and IoT devices.

Application Security: This solution is hosted on a unified application security testing platform and integrates into existing development toolchains. This enables users to quickly identify and remediate security flaws earlier in the development process and supports the development of high-quality, secure code.

Identity & Access Management: We provide enterprise-grade identity management and governance capabilities, including broad provisioning support for on-premises and cloud-based applications, extensibility and flexibility to integrate with other IT systems and control and monitor the access and activity of privileged users.

Payment Security: This is a software as a service ("SaaS")-based payment authentication service to help banks protect against fraud and ensure a hassle-free online shopping experience for their customers.

Fibre Channel Switch Products: The Fibre Channel switch products we acquired in connection with our acquisition of Brocade provide interconnection, bandwidth, and high-speed switching between servers and storage devices which are in a FC SAN. FC SANs are networks dedicated to mission critical storage traffic, and enable simultaneous high speed and secure connections among multiple host computers and multiple storage arrays.

Research and Development

We are committed to continuous investment in product development and enhancement, with a focus on rapidly introducing new, proprietary products and releases. Many of our products have grown out of our own research and development efforts, and have given us competitive advantages in certain target markets due to performance differentiation. However, we opportunistically seek to enhance our capabilities through the acquisition of engineers with complementary research and development skills and complementary technologies and businesses. We focus our research and development efforts on the development of mission critical, innovative, sustainable and higher value product platforms and those that improve the quality and stability in our broadly deployed products. We leverage our design capabilities in markets where we believe our innovation and reputation will allow us to earn attractive margins by developing high value-add products.

We plan to continue investing in product development, both organically and through acquisitions, to drive growth in our business. We also invest in process development and improvements to product features and functions, as well as fabrication capabilities to optimize processes for devices that are manufactured internally. Our field application engineers, design engineers, and product and software development engineers are located in many places around the world, and in many cases near our top customers. This enhances our customer reach and our visibility into new product opportunities and, in the case of our semiconductor customers, enables us to support our customers in each stage of their product development cycle, from the early stages of production design to volume manufacturing and future growth. By collaborating with our customers, we have opportunities to develop high value-added, customized products for them that leverage our existing technologies. We anticipate that we will continue to make significant research and development expenditures in order to maintain our competitive position, and to ensure a continuous flow of innovative and sustainable product platforms.

Customers, Sales and Distribution

We sell our products through our direct sales force and a select network of distributors and channel partners globally. Distributors and OEMs, or their contract manufacturers, typically account for the substantial majority of our semiconductor sales. Historically, a relatively small number of customers have accounted for a significant portion of our net revenue. Sales to distributors accounted for 46% and 34% of our net revenue for fiscal years 2019 and 2018, respectively. Direct sales to WT Microelectronics accounted for 17% of our net revenue for the fiscal year 2019. We believe our aggregate sales to our top five end customers, through all channels, accounted for more than 30% and more than 40% of our net revenue for fiscal years 2019 and 2018, respectively. We believe aggregate sales to Apple Inc., through all channels, accounted for approximately 20% of our net revenue for fiscal year 2019 and approximately 25% for fiscal year 2018. We expect to continue to experience significant customer concentration in future periods. The loss of, or significant decrease in demand from, any of our top five end customers could have a material adverse effect on our business, results of operations and financial condition.

Many of our semiconductor customers design products in North America or Europe that are then manufactured in Asia. To serve customers around the world, we have strategically developed relationships with large global electronic component distributors, complemented by a number of regional distributors with customer relationships based on their respective product ranges. We also sell our products to a wide variety of OEMs or their contract manufacturers. We have established strong relationships with leading OEM customers across multiple target markets. Our direct sales force focuses on supporting our large OEM customers, and has specialized product and service knowledge that enables us to sell specific offerings at key levels throughout a customer's organization. Certain customers require us to contract with them directly and with specified intermediaries, such as contract manufacturers. Many of our major customer relationships have been in place for many years and are often the result of years of collaborative product development. This has enabled us to build our extensive IP portfolio and develop critical expertise regarding our customers' requirements, including substantial system-level knowledge. This collaboration has provided us with key insights into our customers' businesses and has enabled us to be more efficient and productive and to better serve our target markets and customers. Many of our customers and their contract manufacturers often require time critical delivery of our products to multiple locations around the world. With sales offices located in various countries, our primary warehouse in Malaysia, and dedicated regional customer support call centers, where we address customer issues and handle logistics and other order fulfillment requirements, we believe we are well-positioned to support our customers throughout the design, technology transfer and manufacturing stages across all geographies.

Our software customers are in most major industries worldwide, including banks, insurance companies, other financial services providers, government agencies, global IT service providers, telecommunication providers, transportation companies, manufacturers, technology companies, retailers, educational organizations and health care institutions. Our traditional software customers generally consist of large enterprises that have computing environments from multiple vendors and are highly complex. We remain focused on strengthening relationships and increasing penetration within our existing core, mainframe-centric customers and expanding the adoption of our enterprise software offerings with these customers. We believe our enterprise-wide license model will continue to offer our customers reduced complexity, more flexibility and an easier renewal process that will help drive revenue growth.

Manufacturing Operations

We focus on maintaining an efficient global supply chain and a variable, low-cost operating model. Accordingly, we outsource a majority of our manufacturing operations, utilizing third-party foundry and assembly and test capabilities, as well as some of our corporate infrastructure functions. The majority of our front-end wafer manufacturing operations is outsourced to external foundries, including Taiwan Semiconductor Manufacturing Company Limited (“TSMC”), primarily, as well as United Microelectronics Corporation, GlobalFoundries, Silicon Manufacturing Partners Pte. Ltd., Tower Semiconductor Ltd. and WIN Semiconductors Corp. We use third-party contract manufacturers for a significant majority of our assembly and test operations, including Advanced Semiconductor Engineering, Inc., Foxconn Technology Group, Amkor Technology, Inc. and Siliconware Precision Industries Co., Ltd. We use our internal fabrication facilities for products utilizing our innovative and proprietary processes, to protect our IP and to accelerate time to market for our products, while outsourcing commodity processes such as standard CMOS. Examples of internally fabricated semiconductors include our FBAR filters for wireless communications and our vertical-cavity surface emitting laser and side emitting lasers-based on GaAs and InP lasers for fiber optic communications. The majority of our internal III-V semiconductor wafer fabrication is done in the U.S. and Singapore. Many of our products are designed to be manufactured in a specific process, typically at one particular foundry, either our own or with a particular contract manufacturer, and in some instances, we may only qualify one contract manufacturer to manufacture certain of our products.

We also have a long history of operating in Asia, where approximately 35% of our employees are located and where we manufacture and source the majority of our products and materials. We store the majority of our product inventory in our warehouse in Malaysia and our presence in Asia places us in close proximity to many of our customers’ manufacturing facilities and at the center of worldwide electronics manufacturing.

Manufacturing Materials and Suppliers

Our manufacturing operations employ a wide variety of semiconductors, electromechanical components and assemblies and raw materials. We purchase materials from hundreds of suppliers on a global basis. These supply relationships are generally conducted on a purchase order basis. While we have not experienced any significant difficulty in obtaining the materials used in the conduct of our business and we believe that no single supplier is material, some of the parts are not readily available from alternate suppliers due to their unique design or the length of time necessary for re-design or qualification. Our long-term relationships with our suppliers allow us to proactively manage our technology development and product discontinuance plans, and to monitor our suppliers' financial health. Some suppliers may, nonetheless, extend their lead times, limit supplies, increase prices or cease to produce necessary parts for our products. If these are unique or highly specialized components, we may not be able to find a substitute quickly, or at all. To address the potential disruption in our supply chain, we may use a number of techniques, including, in some cases, qualifying more than one source of supply, redesigning products for alternative components and incremental, or in some cases, "lifetime" purchases of affected parts for supply buffer.

Competition

The markets in which we participate are highly competitive. Our competitors range from large, international companies offering a wide range of products to smaller companies specializing in narrow markets. The competitive landscape is changing as a result of a trend toward consolidation within many industries, as some of our competitors have merged with or been acquired by other competitors, while others have begun collaborating with each other. We expect this consolidation trend to continue. We expect competition in the markets in which we participate to continue to increase as existing competitors improve or expand their product offerings and as new companies enter the market. Additionally, our ability to compete effectively depends on a number of factors, including: quality, technical performance, price, product features, product system compatibility, system-level design capability, engineering expertise, responsiveness to customers, new product innovation, product availability, delivery timing and reliability, and customer sales and technical support.

In the semiconductor market, we compete with integrated device manufacturers, fabless semiconductor companies, as well as the internal resources of large, integrated OEMs. Our primary competitors are Analog Devices, Inc., Cisco Systems, Inc., Cree, Inc., Finisar Corp., GlobalFoundries, Hamamatsu Photonics K.K., Heidenhain Corporation, HiSilicon Technologies Co. Ltd., Intel Corp., Lumentum Operations LLC, MACOM Technology Solutions Holdings, Inc., Marvell Technology Group, Ltd., Mediatek Inc., Mellanox Technologies, Inc., Microsemi Corp., Mitsubishi Electric Corporation, Murata Manufacturing Co., Ltd., NXP Semiconductors N.V., Qorvo, Inc., Qualcomm Inc., Quantenna Communications, Inc. (acquired by ON Semiconductor Corporation), ST Microelectronics N.V., Renesas Electronics Corporation, Skyworks Solutions, Inc., Sumitomo Corporation, TDK-EPC Corporation, Toshiba Corporation, and Texas Instruments, Inc. We compete based on the strength and expertise of our high speed proprietary design expertise, FBAR technology, amplifier design, module integration, proprietary materials processes, multiple storage protocols and mixed-signal design, our broad product portfolio, support of key industry standards, reputation for quality products, and our customer relationships.

In the infrastructure software market, we compete with large vendors of hardware and operating system software and cloud service providers, who continue to both expand their product and service offerings, and consolidate offerings into broad product lines. Our primary competitors are AppDynamics, Inc. (acquired by Cisco), Atlassian Corporation, Plc, BMC Software Inc., BeyondTrust, Compuware Corporation, CyberArk Software, Ltd., International Business Machines Corporation, Micro Focus International Plc, Microsoft Corporation, MuleSoft, Inc. (acquired by Salesforce.com, Inc.), New Relic, Inc., Oracle Corporation, SailPoint, Inc., ServiceNow, Inc., SolarWinds, Inc., Splunk, Inc. and VMware, Inc. We compete based on our breadth of portfolio of enterprise management tools, breadth and synergy of offerings, our platform and hardware independence, our global reach, and our deep customer relationships and industry experience.

Intellectual Property

Our success depends in part upon our ability to protect our IP. To accomplish this, we rely on a combination of IP rights, including patents, copyrights, trademarks, service marks, trade secrets and similar IP, as well as customary contractual protections with our customers, suppliers, employees and consultants, and through security measures to protect our trade secrets. We believe our current product expertise, key engineering talent and IP portfolio provide us with a strong platform from which to develop application specific products in key target markets.

As of November 3, 2019, we had 21,677 U.S. and other patents and 1,593 U.S. and other pending patent applications. Our research and development efforts presently result in approximately 100 new patent applications per year, relating to a wide range of ASIC, isolation, encoder, LED, RF and optoelectronic components, enterprise storage products, HDD silicon, PCIe, USB and other standard I/O devices, Ethernet and Fibre-Channel connectivity and controllers, set-top box SoCs, cable modem SoCs, broadband access SoCs, wireless connectivity SoCs, switching/routing SoCs, high performance processor SoCs, infrastructure software, and associated applications. The expiration dates of our patents range from 2019 to 2038, with a small number of patents expiring in the near future, none of which are expected to be material to our IP portfolio. We are not substantially dependent on any single patent or group of related patents.

We focus our patent application program to a greater extent on those inventions and improvements that we believe are likely to be incorporated into our products, as contrasted with more basic research. However, we do not know how many of our pending patent applications will result in the issuance of patents or the extent to which the examination process could require us to narrow our claims.

We and our predecessors have also entered into a variety of IP licensing and cross-licensing arrangements that have both benefited our business and enabled some of our competitors. A portion of our revenue comes from IP licensing royalty payments and from technology claim settlements relating to such IP. We also license third-party technologies that are incorporated into some elements of our design activities, products and manufacturing processes. Historically, licenses of the third-party technologies used by us have generally been available to us on acceptable terms.

The semiconductor industry is characterized by the existence of a large number of patents, copyrights, trademarks and trade secrets and by the vigorous pursuit, protection and enforcement of IP rights, including by patent holding companies that do not make or sell products. Many of our customer agreements require us to indemnify our customers for third-party IP infringement claims. Claims of this sort could harm our relationships with our customers and might deter future customers from doing business with us. With respect to any IP rights claims against us or our customers or distributors, we may be required to cease manufacture of the infringing product, pay damages, expend resources to develop non-infringing technology, seek a license which may not be available on commercially reasonable terms or at all, or relinquish patents or other IP rights.

With respect to our infrastructure software, the source code for our products is protected both as a trade secret and as copyrighted work. Except with respect to software components that are subject to open source licenses, our customers do not generally have access to the source code for our products. Rather, on-premise customers typically access only the executable code for our products, and SaaS customers access only the functionality of our SaaS offerings. Under certain contingent circumstances, some of our customers are beneficiaries of a source code escrow arrangement that enables them to obtain a limited right to access our source code.

Employees

As of November 3, 2019, we had approximately 19,000 employees worldwide. By geography, approximately 53% of our employees are located in North America, 35% in Asia, and 12% in Europe, the Middle East and Africa. In the U.S., none of our employees are represented by a labor union. A small number of our employees in other countries are represented by workers' councils or labor unions or are party to collective bargaining agreements.

Environmental and Other Regulation

Our semiconductor manufacturing operations and research and development involve the use of hazardous substances and are regulated under international, federal, state and local laws governing health, safety and the environment. These regulations include limitations on discharge of pollutants to air, water, and soil; remediation requirements; product chemical content limitations; manufacturing chemical use and handling restrictions; pollution control requirements; waste minimization considerations; and treatment, transport, storage and disposal of solid and hazardous wastes. We are also subject to regulation by the United States Occupational Safety and Health Administration and similar health and safety laws in other jurisdictions.

We believe that our properties and operations at our facilities comply in all material respects with applicable environmental laws and worker health and safety laws. However, the risk of environmental liabilities cannot be completely eliminated and there can be no assurance that the application of environmental, health and safety laws to our business will not require us to incur significant expenditures.

We are also regulated under a number of international, federal, state and local laws regarding recycling, product packaging and product content requirements, including legislation enacted in the U.S., European Union and China, among a growing number of jurisdictions, which have placed greater restrictions on the use of lead, among other chemicals, in electronic products, which affects materials composition and semiconductor packaging. These laws are becoming more stringent and may in the future cause us to incur significant expenditures.

Backlog

Our semiconductor sales are generally made pursuant to short-term purchase orders. These purchase orders are made without deposits and may be, and often are, rescheduled, cancelled or modified on relatively short notice, without substantial penalty. In addition, our mainframe and enterprise software contracting model for the majority of our customers, which are for enterprise-wide licenses, provide for termination thereof by our customers at any time for any reason. As a result, we recognize revenue from these contracts ratably over time. Therefore, we believe that purchase orders or backlog are not necessarily a reliable indicator of future sales.

Seasonality

Historically, our net revenue has typically been higher in the second half of the fiscal year than in the first half, primarily due to seasonality in our wireless communications products. These products have historically experienced seasonality due to launches of new mobile handsets manufactured by our OEM customers. However, from time to time, typical seasonality and industry cyclicality are overshadowed by other factors such as wider macroeconomic effects, the timing of significant product transitions and launches by large OEMs, particularly with our wireless communications products. We have a diversified business portfolio and we believe that our overall revenue is less susceptible to seasonal variations as a result of this diversification.

Other Information

Broadcom was incorporated in Delaware in January 2018 and our headquarters are in San Jose, California. The address of our headquarters is 1320 Ridder Park Drive, San Jose, California 95131, and our telephone number there is (408) 433-8000. Our website is www.broadcom.com. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and other reports (and amendments thereto) filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the Securities and Exchange Commission ("SEC"), as well as proxy statements filed by Broadcom, free of charge at the "Investor Center - SEC Filings" section of our website at www.broadcom.com, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Such periodic reports, proxy statements and other information are also available at the SEC's website at http://www.sec.gov. The reference to our website address does not constitute incorporation by reference of the information contained on or accessible through our website.

ITEM 1A. RISK FACTORS

Our business, operations and financial results are subject to various risks and uncertainties, including those described below, that could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock and preferred stock. The following important factors, among others, could cause our actual results to differ materially from historical results and those expressed in forward-looking statements made by us or on our behalf in filings with the SEC, press releases, communications with investors and oral statements.

Risks Related to Our Business

The majority of our sales come from a small number of customers and a reduction in demand or loss of one or more of our significant customers may adversely affect our business.

We are dependent on a small number of end customers, OEMs, their respective contract manufacturers, and certain distributors for a majority of our business, revenue and results of operations. For fiscal years 2019 and 2018, sales to distributors accounted for 46% and 34% of our net revenue, respectively. Direct sales to WT Microelectronics accounted for 17% of our net revenue for fiscal year 2019. We believe our aggregate sales to our top five end customers, through all channels, accounted for more than 30% and more than 40% of our net revenue for fiscal years 2019 and 2018, respectively. We believe aggregate sales to Apple Inc., through all channels, accounted for approximately 20% of our net revenue for fiscal year 2019 and approximately 25% for fiscal year 2018. This customer concentration increases the risk of quarterly fluctuations in our operating results and our sensitivity to any material, adverse developments experienced by our significant customers.

In addition, our top customers’ purchasing power has, in some cases, given them the ability to make greater demands on us with regard to pricing and contractual terms in general. We expect this trend to continue, which may adversely affect our gross margin on certain products and, should we fail to comply with such terms, might also result in substantial liability that could harm our business, financial condition and results of operations.

Moreover, the terms and conditions under which we do business with most of our semiconductor customers generally do not include commitments by those customers to purchase any specific quantities of products from us. Even in those instances where we enter into an arrangement under which a customer agrees to source an agreed portion of its product needs from us (provided that we are able to meet specified development, supply and quality commitments), the arrangement often includes pricing schedules or methodologies that apply regardless of the volume of products purchased, and those customers may not purchase the amount of product we expect. As a result, we may not generate the amount of revenue or the level of profitability we expect under such arrangements. If we do not perform under these arrangements, we could also be liable for significant monetary damages. In addition, we are selling an increasing amount of our semiconductor products through a limited number of distributors, which may expose us to additional customer concentration and related credit risks.

The loss of, or any substantial reduction in sales to, any of our major customers could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Dependence on contract manufacturing and suppliers of critical components within our supply chain may adversely affect our ability to bring products to market, damage our reputation and adversely affect our results of operations.

We operate a primarily outsourced manufacturing business model that principally utilizes third-party wafer foundry and module assembly and test capabilities, referred to as contract manufacturers. Our semiconductor products require semiconductor wafer manufacturers with state-of-the-art fabrication equipment and techniques, and most of our products are designed to be manufactured in a specific process, typically at one particular fab or foundry, either our own or with a particular contract manufacturer.

We depend on our contract manufacturers to allocate sufficient manufacturing capacity to meet our needs, to produce products of acceptable quality at acceptable yields, and to deliver those products to us on a timely basis. Although we often have long-term contracts with our contract manufacturers, we do not generally have long-term capacity commitments. We obtain substantially all of our manufacturing services on a purchase order basis and our contract manufacturers have no obligation to provide us with any specified minimum quantities of product. Further, from time to time, our contract manufacturers will cease to, or will become unable to, manufacture a component for us. As the lead time needed to identify, qualify and establish reliable production at acceptable yields, with a new contract manufacturer is typically lengthy, there is often no readily available alternative source for the wafers or other contract manufacturing services we require, and there may be other constraints on our ability to change contract manufacturers. In addition, qualifying such contract manufacturers is often expensive, and they may not produce products as cost-effectively as our current suppliers, which would reduce our margins. In any such circumstances, we may be unable to meet our customer demand and may fail to meet our contractual obligations. This could result in the payment of significant damages by us to our customers, and our net revenue could decline, adversely affecting our business, financial condition and results of operations.

We utilize TSMC to produce the substantial majority of our semiconductor wafers. TSMC manufactured approximately 85% of the wafers manufactured by our contract manufacturers during fiscal year 2019. Our wafer requirements represent a significant portion of the total production capacity of TSMC. However, TSMC also fabricates wafers for other companies, including certain of our competitors, and could choose to prioritize capacity for other customers or reduce or eliminate deliveries to us on short notice, or raise their prices to us, all of which could harm our business, results of operations and gross margin.

Any substantial disruption in TSMC's supply of wafers to us, or in the other contract manufacturing services that we utilize, as a result of a natural disaster, political unrest, military conflict, economic instability, equipment failure or other cause, could materially harm our business, customer relationships and results of operations.

We also depend on our contract manufacturers to timely develop new, advanced manufacturing processes, including, in the case of wafer fabrication, transitions to smaller geometry process technologies. If these new processes are not timely developed or we do not have sufficient access to them, we may be unable to maintain or increase our manufacturing efficiency to the same extent as our competitors or to deliver products to our customers, which could result in loss of revenue opportunities and damage our relationships with our customers.

We purchase a significant amount of the materials used in our products from a limited number of suppliers.

Our manufacturing processes and those of our contract manufacturers rely on many materials, including silicon, gallium arsenide and indium phosphide wafers, copper lead frames, precious and rare earth metals, mold compound, ceramic packages and various chemicals and gases. We purchase a significant portion of our semiconductor materials, components and finished goods used in our products from a few materials providers, some of which are single source suppliers. During the fiscal year 2019, we purchased more than two-thirds of the materials for our manufacturing processes from five materials providers. Substantially all of our purchases are on a purchase order basis, and we do not generally have long-term contracts with our materials providers. Suppliers may extend lead times, limit supplies or increase prices due to commodity price increases, capacity constraints or other factors, which may lead to interruption of supply or increased demand in the industry. In the event that we cannot timely obtain sufficient quantities of materials or at reasonable prices, the quality of the material deteriorates or we are not able to pass on higher materials or energy costs to our customers, our business, financial condition and results of operations could be adversely impacted.

Adverse global economic conditions could have a negative effect on our business, results of operations and financial condition and liquidity.

A general slowdown in the global economy or in a particular region or industry, an increase in trade tensions with U.S. trading partners or a tightening of the credit markets could negatively impact our business, financial condition and liquidity. Adverse global economic conditions have from time to time caused or exacerbated significant slowdowns in the industries and markets in which we operate, which have adversely affected our business and results of operations. In recent periods, investor and customer concerns about the global economic outlook have adversely affected market and business conditions in general. Macroeconomic weakness and uncertainty also make it more difficult for us to accurately forecast revenue, gross margin and expenses, and may make it more difficult to raise or refinance debt. An escalation of recent trade tensions between the U.S. and China has resulted in trade restrictions and increased tariffs that harm our ability to participate in Chinese markets or compete effectively with Chinese companies. Sustained uncertainty about, or worsening of, current global economic conditions and further escalation of trade tensions between the U.S. and its trading partners, especially China, could result in a global economic slowdown and long-term changes to global trade. Such events may also (i) cause our customers and consumers to reduce, delay or forgo technology spending, (ii) result in customers sourcing products from other suppliers not subject to such restrictions or tariffs, (iii) lead to the insolvency or consolidation of key suppliers and customers, and (iv) intensify pricing pressures. Any or all of these factors could negatively affect demand for our products and our business, financial condition and results of operations.

Our business, financial condition and results of operations could be adversely affected by the political and economic conditions of the countries in which we conduct business and other factors related to our international operations.

A majority of our products are produced, sourced and sold internationally and our international revenue represents a significant percentage of our overall revenue. In addition, as of November 3, 2019, approximately 51% of our employees are located outside the U.S. Multiple factors relating to our international operations and to particular countries in which we operate could have a material adverse effect on our business, financial condition and results of operations. These factors include:

- changes in political, regulatory, legal or economic conditions or geopolitical turmoil, including terrorism, war or political or military coups, or civil disturbances or political instability;

- restrictive governmental actions, such as restrictions on the transfer or repatriation of funds and foreign investments, data privacy regulations and trade protection measures, including increasing protectionism, import/export restrictions, import/export duties and quotas, trade sanctions and customs duties and tariffs, all of which have increased under the current U.S. administration;
- difficulty in obtaining product distribution and support, and transportation delays;
- potential inability to localize software products for a significant number of international markets;
- difficulty in conducting due diligence with respect to business partners in certain international markets;
- public health or safety concerns;
- nationalization of businesses and expropriation of assets; and
- changes in tax laws.

A significant legal risk associated with conducting business internationally is compliance with the various and differing laws and regulations, including anti-corruption and anti-bribery laws and regulations, of the countries in which we do business, antitrust and competition laws, data privacy laws, money-laundering regulations and export regulations. In addition, the laws in various countries are constantly evolving and may, in some cases, conflict with each other. Although our Code of Ethics and Business Conduct and other policies prohibit us, our employees and our agents from engaging in unethical business practices, there can be no assurance that all of our employees, distributors or other agents will refrain from acting in violation of our related anti-corruption policies and procedures. Any such violation could have a material adverse effect on our business.

We may pursue acquisitions, investments, joint ventures and dispositions, which could adversely affect our results of operations.

Our growth strategy includes the acquisition of, and investment in, businesses that offer complementary products, services and technologies, augment our market coverage, or enhance our technological capabilities, such as our recent acquisition of the Symantec Business. We may also enter into strategic alliances or joint ventures to achieve these goals. We may not be able to identify suitable acquisition, investment, alliance, or joint venture opportunities, or to consummate any such transactions. In addition, our original estimates and assumptions used in assessing any transaction may be inaccurate and we may not realize the expected financial or strategic benefits of any such transaction, including our recent acquisition of the Symantec Business.

Any acquisitions we may undertake and their integration, including our recent acquisition of the Symantec Business, involve risks and uncertainties, such as:

- unexpected delays, challenges and related expenses, and disruption of our business;
- diversion of management's attention from daily operations and the pursuit of other opportunities;
- our ability to effectively identify and timely transfer acquired assets and liabilities;
- the need to assign or novate acquired customer contracts;
- our ability to identify and directly hire acquired company or business employees;
- our ability to identify, manage and coordinate the performance of acquired company or business personnel providing services to us on a transitional basis or under third party transition services agreements;
- incurring significant restructuring charges and amortization expense, assuming liabilities and ongoing lawsuits, potential impairment of acquired goodwill and other intangible assets, and increasing our expenses and working capital requirements;
- implementing our management information systems, operating systems and internal controls for the acquired operations;
- our due diligence process may fail to identify significant issues with the acquired company's products, financial disclosures, accounting practices, legal, tax and other contingencies, compliance with local laws and regulations (and interpretations thereof) in multiple international jurisdictions, as well as compliance with U.S. laws and regulations;
- additional acquisition-related debt, which could increase our leverage and potentially negatively affect our credit ratings resulting in more restrictive borrowing terms or increased borrowing costs thereby limiting our ability to borrow; and
- dilution of stock ownership of existing stockholders.

In addition, regulatory approvals required in connection with an acquisition, such as those from the U.S. Department of Justice, the U.S. Federal Trade Commission ("FTC"), the European Commission Directorate-General for Competition or, where applicable, the China State Administration for Market Regulation, may take longer than anticipated to obtain, may not be obtained at all or may contain materially burdensome conditions. If any conditions or changes to the structure of an acquisition are required to obtain these regulatory approvals, they may have the effect of jeopardizing or delaying completion of such acquisition or reducing our anticipated benefits of the transaction. If we agree to any material conditions in order to obtain any such approvals or if we fail to comply with any such conditions, our business and results of operations may be adversely affected.

These difficulties may be complicated by factors such as the size of the business or entity acquired, geographic and cultural differences, lack of experience operating in the industry or geographic markets of the acquired business, potential loss of key employees and customers, the potential for deficiencies in internal controls at the acquired or combined business, performance problems with the acquired business' technology, failure to realize the benefits of transition services arrangements, exposure to unanticipated liabilities of the acquired business, insufficient revenue to offset increased expenses associated with the acquisition, adverse tax consequences and our potential inability to achieve the growth prospects or synergies expected from any such acquisition.

If we fail to complete an announced acquisition, our stock price could fall to the extent the price reflects an assumption that such acquisition will be completed, and we may incur significant unrecoverable costs. Further, the failure to consummate an acquisition may result in negative publicity and adversely impact our relationships with our customers, vendors and employees. We may become subject to legal proceedings relating to the acquisition and the integration of acquired businesses may not be successful. Failure to manage and successfully integrate acquired businesses, achieve anticipated levels of profitability of the acquired business, improve margins of the acquired businesses and products, or realize other anticipated benefits of an acquisition could materially harm our business, operating results and margins.

From time to time, we may also seek to divest or wind down portions of our business, either acquired or otherwise, or we may exit minority investments, each of which could materially affect our cash flows and results of operations. Any future dispositions we may make could involve risks and uncertainties, including our ability to sell such businesses on terms acceptable to us, or at all. In addition, any such dispositions could result in disruption to other parts of our business, potential loss of employees or customers, or exposure to unanticipated liabilities or ongoing obligations to us following any such dispositions. For example, in connection with such dispositions, we often enter into transition services agreements or other strategic relationships, including long-term research and development arrangements and sales arrangements, or agree to provide certain indemnities to the purchaser, which may result in additional expenses and may adversely affect our financial condition and results of operations. In addition, dispositions may include the transfer of technology and/or the licensing of certain IP rights to third-party purchasers, which could limit our ability to utilize such IP rights or assert these rights against such third-party purchasers or other third parties.

Our business is subject to various governmental regulations, and compliance with these regulations may cause us to incur significant expense. If we fail to maintain compliance with applicable regulations, we may be forced to cease the manufacture and distribution of certain products, and we could be subject to civil or criminal penalties.

Our business is subject to various international laws and other legal requirements, including packaging, product content, labor and import/export regulations, such as the U.S. Export Administration Regulations, and applicable executive orders, and many of our semiconductor products are regulated or sold into regulated industries. These laws, regulations and orders are complex, may change frequently and with limited notice, have generally become more stringent over time and have intensified under the current U.S. administration, especially in light of recent trade tensions with China. We may be required to incur significant expense to comply with, or to remedy violations of, these regulations. In addition, if our customers fail to comply with these regulations, we may be required to suspend sales to these customers, which could damage our reputation and negatively impact our results of operations. For example, on May 15, 2019, the U.S. Department of Commerce added Huawei Technologies Co. Ltd., one of our customers, to its "Entity List" and placed certain export restrictions on Huawei and its suppliers, which required us to suspend certain sales to Huawei during the pendency of such restrictions and which has had a corresponding adverse effect on our revenue.

In addition, the manufacture and distribution of our semiconductors must comply with various laws and adapt to changes in regulatory requirements as they occur. For example, if a country in which our products are manufactured or sold sets technical standards that are not widely shared, it may require us to stop distributing our products commercially until they comply with such new standards, lead certain of our customers to suspend imports of their products into that country, require manufacturers in that country to manufacture products with different technical standards and disrupt cross-border manufacturing relationships, any of which could have a material adverse effect on our business, financial condition and results of operations. If we fail to comply with these requirements, we could also be required to pay civil penalties or face criminal prosecution. In addition, it is expected that the current U.S. administration's trade policy will promote U.S. manufacturing and

manufacturers. It is unclear what effect this will have on us as a multinational company that conducts business world-wide, or on our suppliers, customers, contract manufacturers and OEMs.

Our products and operations are also subject to the rules of industrial standards bodies, like the International Standards Organization, as well as regulation by other agencies, such as the FTC. If we fail to adequately address any of these rules or regulations, our business could be harmed.

We are subject to risks associated with our distributors and other channel partners, including product inventory levels and product sell-through.

We sell our products through a direct sales force and a select network of distributors and other channel partners globally. Sales to distributors accounted for 46% of our net revenue in fiscal year 2019 and are subject to a number of risks, including:

- fluctuations in demand based on our distributors' product inventory levels and end customer demand in a given quarter;
- our distributors and other channel partners are generally not subject to minimum sales requirements or any obligation to market our products to their customers;
- our distributors and other channel partners agreements are generally nonexclusive and may be terminated at any time without cause;
- our lack of control over the timing of delivery of our products to end customers;
- our distributors and other channel partners may market and distribute competing products and may, from time to time, place greater emphasis on the sale of these products due to pricing, promotions and other terms offered by our competitors; and
- dependence on a limited number of semiconductor distributors may exacerbate the foregoing risks and increase our related credit risk.

One of our significant distributors, Tech Data Corporation, recently agreed to be acquired by a private equity firm, which may result in a change in their operations, business focus and financial capacity. If and when completed, this could adversely affect our relationship with, and ability to sell products to, them.

We do not always have a direct relationship with the end customers of our products. As a result, our semiconductor products may be used in applications for which they were not necessarily designed or tested, including, for example, medical devices, and they may not perform as anticipated in such applications. In such event, failure of even a small number of parts could result in significant liabilities to us, damage our reputation and harm our business and results of operations.

Our business would be adversely affected by the departure of existing members of our senior management team.

Our success depends, in large part, on the continued contributions of our senior management team, and in particular, the services of Mr. Hock E. Tan, our President and Chief Executive Officer. Effective succession planning is also important for our long-term success. Failure to ensure effective transfers of knowledge and smooth transitions involving senior management could hinder our strategic planning and execution. None of our senior management is bound by written employment contracts. In addition, we do not currently maintain key person life insurance covering our senior management. The loss of any of our senior management could harm our ability to implement our business strategy and respond to the rapidly changing market conditions in which we operate.

If we are unable to attract and retain qualified personnel, especially our engineering and technical personnel, we may not be able to execute our business strategy effectively.

Our future success depends on our ability to retain, attract and motivate qualified personnel. We also seek to acquire talented engineering and technical personnel (including cybersecurity experts), as well as effective sales professionals, through acquisitions we may make from time to time or otherwise. We have historically encountered some difficulties in hiring and retaining qualified engineers, particularly in Silicon Valley and Southeast Asia where qualified engineers are in high demand. In addition, current or future immigration laws may make it more difficult to hire or retain qualified engineers, further limiting the pool of available talent. Further, our employees, including employees whom we have retained as a result of an acquisition, may decide not to continue working for us and may leave with little or no notice. As the source of our technological and product innovations, our engineering and technical personnel are a significant asset. We have granted multi-year equity awards to most of our employees. These awards approximate four consecutive annual grants that vest in four tranches with successive four-year vesting periods. While we believe these awards provide a powerful long-term retention incentive to employees, we may be incorrect in this assumption, particularly if there is a material and persistent decline in the price of our stock. In addition, we may be unable to obtain required stockholder approvals of future equity compensation plans. As a result, we may be limited in granting equity-based incentives and may impair our efforts to attract and retain necessary

personnel. Any inability to retain, attract or motivate such personnel could have a material adverse effect on our business, financial condition and results of operations.

We may be involved in legal proceedings, including IP, anti-competition and securities litigation, employee-related claims and regulatory investigations, which could, among other things, divert efforts of management and result in significant expense and loss of our IP rights.

We are often involved in legal proceedings, including cases involving our IP rights and those of others, anti-competition and commercial matters, acquisition-related suits, securities class action suits, employee-related claims and other actions. Some of these actions may seek injunctive relief, including injunctions or exclusion orders against the sale of our products and substantial monetary damages, which if granted or awarded could materially harm our business, financial condition and results of operations. From time to time, we may also be involved or required to participate in regulatory investigations or inquiries, such as the ongoing investigations by the FTC and the European Commission into certain of our contracting practices, which may evolve into legal or other administrative proceedings. Litigation or settlement of such actions, regardless of their merit, or involvement in regulatory investigations or inquiries, can be complex, can extend for a protracted period of time, can divert the efforts and attention of our management and technical personnel, and is frequently costly, with the related expenditures unpredictable. An unfavorable resolution of a governmental investigation may include, among others, fines or other orders to disgorge profits or make other payments, and/or the issuance of orders to cease certain conduct and/or modify our contracting practices, any or all of which could materially adversely affect our reputation and our business, financial condition and results of operations.

The industries in which we operate are characterized by companies holding large numbers of patents, copyrights, trademarks and trade secrets and by the vigorous pursuit, protection and enforcement of IP rights, including actions by patent-holding companies that do not make or sell products. From time to time, third parties assert against us and our customers and distributors their patent, copyright, trademark, trade secret and other IP rights to technologies that are important to our business.

Many of our customer agreements, and in some cases our asset sale agreements, and/or the laws of certain jurisdictions may require us to indemnify our customers or purchasers for third-party IP infringement claims, including costs to defend those claims, and payment of damages in the case of adverse rulings. However, our contract manufacturers and suppliers may or may not be required to indemnify us should we or our customers be subject to such third-party claims. Claims of this sort could also harm our relationships with our customers and might deter future customers from doing business with us. We do not know whether we will prevail in such proceedings, given the complex technical issues and inherent uncertainties in IP litigation. If any pending or future proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the infringing products, processes or technology and/or make changes to our processes or products;
- pay substantial damages for past, present and future use of the infringing technology;
- expend significant resources to develop non-infringing technology;
- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- enter into cross-licenses with our competitors, which could weaken our overall IP portfolio and our ability to compete in particular product categories;
- indemnify our customers or distributors and/or recall, or accept the return of, infringing products;
- pay substantial damages to our direct or end customers to discontinue use or replace infringing technology with non-infringing technology; or
- relinquish IP rights associated with one or more of our patent claims, if such claims are held invalid or otherwise unenforceable.

Any of the foregoing results could have a material adverse effect on our business, financial condition and results of operations.

In addition, we may be obligated to indemnify our current or former directors or employees, or former directors or employees of companies that we have acquired, in connection with litigation or regulatory investigations. These liabilities could be substantial and may include, among other things, the cost of defending lawsuits against these individuals, as well as stockholder derivative suits; the cost of government, law enforcement or regulatory investigations; civil or criminal fines and penalties; legal and other expenses; and expenses associated with the remedial measure, if any, which may be imposed.

Our operating results are subject to substantial quarterly and annual fluctuations.

Our operating results have fluctuated in the past and are likely to fluctuate in the future. These fluctuations may occur on a quarterly and annual basis and are due to a number of factors, many of which are beyond our control. These factors include, among others:

- customer concentration and the gain or loss of significant customers;
- the timing of launches by our customers of new products, such as mobile handsets, in which our products are included and changes in end-user demand for the products manufactured and sold by our customers;
- changes in our product mix or customer mix and their effect on our gross margin;
- the shift to cloud-based IT solutions and services, such as hyperscale computing, which may adversely affect the timing and volume of sales of our products for use in traditional enterprise data centers;
- the timing of receipt, reduction or cancellation of significant product orders by customers;
- the timing of new software contracts and renewals, as well as the timing of any terminations of software contracts that require us to refund to customers any pre-paid amounts under the contract, which may adversely affect our cash flows;
- fluctuations in the levels of component or product inventories held by our customers;
- utilization of our internal manufacturing facilities and fluctuations in manufacturing yields;
- our ability to successfully and timely integrate, and realize the benefits of acquisitions we may make and the timing of acquisitions or dispositions of, or making and exiting investments in, other entities, businesses or technologies;
- our ability to develop, introduce and market new products and technologies on a timely basis;
- the timing and extent of our software license and subscription revenue, and other non-product revenue, such as product development revenue and royalty and other payments from IP sales and licensing arrangements;
- new product announcements and introductions by us or our competitors;
- seasonality or other fluctuations in demand in our markets;
- IP disputes and associated litigation expense;
- timing and amount of research and development and related new product expenditures, and the timing of receipt of any research and development grant monies;
- significant warranty claims, including those not covered by our suppliers or our insurers;
- availability and cost of raw materials and components from our suppliers;
- timing of any regulatory changes, particularly with respect to trade sanctions and customs duties and tariffs, and tax reform;
- fluctuations in currency exchange and interest rates;
- changes in taxation of international businesses, which could increase our overall cash tax costs;
- changes in our tax structure or incentive arrangements, which may adversely affect our net tax expense and our cash flow in any quarter in which such an event occurs;
- loss of key personnel or the shortage of available skilled workers; and
- the effects of competitive pricing pressures, including decreases in average selling prices of our products.

The foregoing factors are often difficult to predict, and these, as well as other factors, could materially adversely affect our quarterly or annual operating results. In addition, a significant amount of our operating expenses are relatively fixed in nature due to our significant sales, research and development, and internal manufacturing overhead expenses. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. As a result, we believe that quarter-to-quarter comparisons of our revenue and operating results may not be meaningful or a reliable indicator of our future performance. If our operating results in one or more future quarters fail to meet the expectations of securities analysts or investors, a significant decline in the trading price of our common stock may occur, which may happen immediately or over time.

Failure to adjust our manufacturing and supply chain to accurately meet customer demand could adversely affect our results of operations.

We make significant decisions, including determining the levels of business that we will seek and accept, production schedules, levels of reliance on contract manufacturing and outsourcing, internal fabrication utilization and other resource requirements, based on our estimates of customer requirements. Factors that can impact our ability to accurately estimate future customer requirements include the short-term nature of many customers' commitments, our customers' ability to reschedule, cancel and modify orders with little or no notice and without significant penalty, the accuracy of our customers' forecasts and the possibility of rapid changes in demand for our customers' products, as well as seasonal or cyclical trends in their industries or the semiconductor industry.

To ensure the availability of our semiconductor products, particularly for our largest customers, we typically start manufacturing our relevant products based on our customers' forecasts, which are not binding. As a result, we incur inventory and manufacturing costs in advance of anticipated sales that may never materialize or that may be substantially lower than expected. If actual demand for our products is lower than forecast, we may also experience higher inventory carrying and operating costs and product obsolescence. Because certain of our sales, research and development, and internal manufacturing overhead expenses are relatively fixed, a reduction in customer demand may also decrease our gross margin and operating income.

Conversely, customers often require rapid increases in production on short notice. We may be unable to secure sufficient materials or contract manufacturing capacity to meet such increases in demand. This could damage our customer relationships, reduce revenue growth and margins, subject us to additional liabilities, harm our reputation, and prevent us from taking advantage of opportunities.

We operate in the highly cyclical semiconductor industry, which is subject to significant downturns.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change and price erosion, evolving technical standards, frequent new product introductions, short product life cycles (for semiconductors and for many of the end products in which they are used) and wide fluctuations in product supply and demand. From time to time, these factors, together with changes in general economic conditions, cause significant upturns and downturns in the industry in general, and in our business in particular. Periods of industry downturns have been characterized by diminished demand for end-user products, high inventory levels and periods of inventory adjustment, under-utilization of manufacturing capacity, changes in revenue mix and accelerated erosion of average selling prices. We expect our business to continue to be subject to cyclical downturns even when overall economic conditions are relatively stable. If we cannot offset industry or market downturns, our net revenue may decline and our financial condition and results of operations may suffer.

Winning business in the semiconductor solutions industry is subject to a lengthy process that often requires us to incur significant expense, from which we may ultimately generate no revenue.

Our semiconductor business is dependent on us winning competitive bid selection processes, known as "design wins". These selection processes are typically lengthy and can require us to dedicate significant development expenditures and scarce engineering resources in pursuit of a single customer opportunity. Failure to obtain a particular design win may prevent us from obtaining design wins in subsequent generations of a particular product. This can result in lost revenue and can weaken our position in future competitive bid selection processes.

Winning a product design does not guarantee sales to a customer or that we will realize as much revenue as anticipated, if any. A delay or cancellation of a customer's plans could materially and adversely affect our financial results, as we incur significant expense in the design process and may generate little or no revenue from it. In addition, the timing of design wins is unpredictable and implementing production for a major design win, or multiple design wins occurring at the same time, may strain our resources and those of our contract manufacturers. In such event, we may be forced to dedicate significant additional resources and incur additional, unanticipated costs and expenses. Often customers will only purchase limited numbers of evaluation units from us until they qualify the products and/or the manufacturing line for those products. The qualification process can take significant time and resources and we may not always be able to satisfy customers' qualification requirements. Delays in qualification or failure to qualify our products may cause a customer to discontinue use of our products and result in a significant loss of revenue. Finally, customers could choose at any time to stop using our products or could fail to successfully market and sell their products, which could reduce demand for our products, and cause us to hold excess inventory, materially adversely affecting our business, financial condition and results of operations. These risks are exacerbated by the fact that many of our products, and the end products into which our products are incorporated, often have very short life cycles.

Competition in our industries could prevent us from growing our revenue.

The industries in which we operate are highly competitive and characterized by rapid technological changes, evolving industry standards, changes in customer requirements, often aggressive pricing practices and, in some cases, new delivery

methods. We expect competition in these industries to continue to increase as existing competitors improve or expand their product offerings or as new competitors enter our markets.

In addition, the competitive landscape is changing in these industries as a result of a trend toward consolidation. Some of our direct competitors have merged with or been acquired by other competitors. We expect this consolidation trend to continue, which may result in the combined competitors having greater manufacturing, distribution, financial, research and development or marketing resources than us. In addition, some of our competitors may also receive financial and other support from their home country government or may have a greater presence in key markets, a larger customer base or more comprehensive IP portfolio and patent protection than us.

We compete with integrated device manufacturers and fabless semiconductor companies, as well as the internal resources of large, integrated OEMs. Because our products are often building block semiconductors, providing functions that in some cases can be integrated into more complex integrated circuits (“ICs”), we also face competition from manufacturers of ICs, as well as customers that may develop their own IC products. Our competitors in these markets range from large, international companies offering a wide range of semiconductor products and devices to smaller companies specializing in niche markets and new technologies.

Our competitors also include large vendors of hardware and operating system software and cloud service providers. Some of our competitors have longer operating histories, greater name recognition, a larger installed base of customers in any particular market, larger technical staffs, more established relationships with hardware vendors, or greater financial, technical and marketing resources than us. We also face competition from numerous start-ups and smaller companies that specialize in specific aspects of the highly fragmented software industry, open source authors who may provide software and intellectual property for free, competitors who may offer their products through try-and-buy or freemium models, and customers who may develop competing products.

The actions of our competitors, in the areas of pricing and product bundling in particular, could have a substantial adverse impact on us. Further, competitors may leverage their IP or other proprietary information, including interface or interoperability information, in new and emerging technologies and platforms that may inhibit our ability to compete effectively. If we are unable to compete successfully, we may lose market share for our products or incur significant reduction in our gross margins, either of which could have a material adverse effect on our business and results of operations.

A prolonged disruption of our manufacturing facilities, research and development facilities or other significant operations, or those of our suppliers, could have a material adverse effect on our business, financial condition and results of operations.

Although we operate a primarily outsourced manufacturing business model, we also rely on our own manufacturing facilities, in particular in Fort Collins, Colorado, Singapore, and Breinigsville, Pennsylvania. We use these internal fabrication facilities for products utilizing our innovative and proprietary processes, in order to protect our IP, to accelerate time to market of our products and to ensure supply of certain components. Our Fort Collins and Breinigsville facilities are the sole sources for the film bulk acoustic resonator components used in many of our wireless devices and for the indium phosphide-based wafers used in our fibre optics products, respectively. Many of our facilities, and those of our contract manufacturers and suppliers, are located in California and the Pacific Rim region, which has above average seismic activity and severe weather activity. In addition, our research and development personnel are primarily concentrated in China, Czech Republic, India, Israel, Malaysia, Singapore, South Korea, Taiwan, Colorado, California and Pennsylvania, with the expertise of the personnel at each such location tending to be focused on one or two specific areas.

A prolonged disruption at one or more of our manufacturing facilities for any reason, especially our Colorado, Singapore and Pennsylvania facilities, or those of our contract manufacturers or suppliers, due to natural- or man-made disasters or other events outside of our control, such as equipment malfunction or widespread outbreaks of acute illness at one or more of these facilities, would limit our capacity to meet customer demands and delay new product development until a replacement facility and equipment, if necessary, were found. Any such event would likely disrupt our operations, delay production, shipments and revenue, result in us being unable to timely satisfy customer demand, expose us to claims by our customers resulting in significant expense to repair or replace our affected facilities, and, in some instances, could significantly curtail our research and development efforts in a particular product area or target market. As a result, we could forgo revenue opportunities, potentially lose market share, damage our customer relationships and be subject to litigation and additional liabilities, all of which could materially and adversely affect our business. Although we purchase insurance to mitigate certain losses, such insurance often carries a high deductible amount and any uninsured losses could negatively affect our operating results. In addition, even if we were able to promptly resume production of our affected products, if our customers cannot timely resume their own manufacturing following such an event, they may cancel or scale back their orders from us and this may in turn adversely affect our results of operations. Such events could also result in increased fixed costs relative to the revenue we generate and adversely affect our results of operations.

We may be unable to maintain appropriate manufacturing capacity at our own manufacturing facilities, which could adversely affect our relationships with our customers, and our business, financial condition and results of operations.

We must maintain appropriate capacity at our own manufacturing facilities to meet anticipated customer demand for our proprietary products. From time to time, this requires us to invest in expansion or improvements of those facilities, which often involves substantial cost and other risks, such as delays in completion. Such expanded manufacturing capacity may still be insufficient, or may not come online soon enough, to meet customer demand and we may have to put customers on product allocation, forgo sales or lose customers as a result. Conversely, if we overestimate customer demand, we would experience excess capacity and fixed costs at these facilities, all of which could adversely affect our results of operations.

Any failure of our IT systems or one or more of our corporate infrastructure vendors to provide necessary services could have a material adverse effect on our business.

We depend on various IT systems, including networks, applications, internal IT systems and personnel, and outsourced services for, among other things, financial reporting and product orders and shipments. We rely on third-party vendors to provide critical corporate infrastructure services on a timely and effective basis and to adequately address cybersecurity threats to their own systems. Services provided by these third parties include certain services related to shipping, human resources, benefit plan administration, IT network development and network monitoring. While we may be entitled to damages if our vendors fail to perform under their agreements with us, we may be unable to collect on any award of damages and any award may be insufficient to cover the actual costs we may incur as a result of a vendor's failure to perform under its agreement with us. Upon expiration or termination of any of our third-party vendor agreements we may not be able to timely replace the vendor on terms and conditions, including service levels and costs, which are favorable to us. In addition, a transition from one vendor to another vendor could subject us to operational delays and inefficiencies until the transition is complete.

Any failure of these internal or third-party systems and services to operate effectively could disrupt our operations and could have a material adverse effect on our business, financial condition and results of operations by harming our ability to accurately forecast sales demand, manage our supply chain and production facilities, fulfill customer orders, and report financial and other information on a timely and accurate basis.

Our gross margin is dependent on a number of factors, including our product mix, price erosion, acquisitions we may make, level of capacity utilization and commodity prices.

Our gross margin is highly dependent on product mix, which is susceptible to seasonal and other fluctuations in our markets. A shift in sales mix away from our higher margin products, as well as the timing and amount of our software licensing and non-product revenue, could adversely affect our future gross margin percentages. In addition, increased competition and the existence of product alternatives, more complex engineering requirements, lower demand or reductions in our technological lead compared to our competitors, and other factors may lead to further price erosion, lower revenue and lower margin for us in the future.

Our gross margin may also be adversely affected by expenses related to the acquisitions of businesses, such as amortization of intangible assets and restructuring and impairment charges. Furthermore, businesses or companies that we acquire may have different gross margin profiles than us and could, therefore, also affect our overall gross margin.

In addition, semiconductor manufacturing requires significant capital investment, leading to high fixed costs, including depreciation expense. If we are unable to utilize our owned manufacturing facilities at a high level, the fixed costs associated with these facilities, such as depreciation expense, will not be fully absorbed, resulting in higher average unit costs and a lower gross margin. Furthermore, fluctuations in commodity prices, either directly in the price of the raw materials we buy, or as a result of price increases passed on to us by our suppliers, could negatively impact our margins. We do not hedge our exposure to commodity prices, some of which (including gold and fuel prices) are very volatile, and sudden or prolonged increases in commodities prices may adversely affect our gross margin.

We utilize a significant amount of IP in our business. If we are unable or fail to protect our IP, our business could be adversely affected.

Our success depends in part upon protecting our IP. To accomplish this, we rely on a combination of IP rights, including patents, copyrights, trademarks and trade secrets, as well as customary contractual protections with our customers, suppliers, employees and consultants. We may be required to spend significant resources to monitor and protect our IP rights, including unauthorized use of our products, the usage rates of the software seat licenses and subscriptions that we sell, and even with significant expenditures we may not be able to protect the IP rights that are valuable to our business. We are unable to predict or assure that:

- the IP rights that we presently employ in our business will not lapse or be invalidated, circumvented, challenged, or, in the case of third-party IP rights licensed to us, be licensed to others;

- our IP rights will provide competitive advantages to us;
- rights previously granted by third parties to IP licensed or assigned to us, including portfolio cross-licenses, will not hamper our ability to assert our IP rights against potential competitors or hinder the settlement of currently pending or future disputes;
- any of our pending or future patent, trademark or copyright applications will be issued or have the coverage originally sought;
- our IP rights will be enforced in certain jurisdictions where competition may be intense or where legal protection may be weak; or
- we have sufficient IP rights to protect our products or our business.

In addition, our competitors or others may develop products or technologies that are similar or superior to our products or technologies, duplicate our products or technologies or design around our protected technologies. Effective patent, trademark, copyright and trade secret protection may be unavailable or more limited in other jurisdictions, relative to those protections available in the U.S., and may not be applied for or may be abandoned in one or more relevant jurisdictions. We may elect to abandon or divest patents or otherwise not pursue prosecution of certain pending patent applications, due to strategic concerns or other factors. In addition, when patents expire, we lose the protection and competitive advantages they provided to us.

We also generate some of our revenue from licensing royalty payments and from technology claim settlements relating to certain of our IP. Licensing of our IP rights, particularly exclusive licenses, may limit our ability to assert those IP rights against third parties, including the licensee of those rights. In addition, we may acquire companies with IP that is subject to licensing obligations to other third parties. These licensing obligations may extend to our own IP following any such acquisition and may limit our ability to assert our IP rights. From time to time, we pursue litigation to assert our IP rights, including, in some cases, against third parties with whom we have ongoing relationships, such as customers and suppliers. Claims of this sort could also harm our relationships with our customers and might deter future customers from doing business with us. Conversely, third parties may pursue IP litigation against us, including as a result of our IP licensing business. An adverse decision in such types of legal action could limit our ability to assert our IP rights and limit the value of our technology, including the loss of opportunities to sell or license our technology to others or to collect royalty payments based upon successful protection and assertion of our IP against others. In addition, such legal actions or adverse decisions could otherwise negatively impact our business, financial condition and results of operations.

From time to time, we may need to obtain additional IP licenses or renew existing license agreements. We are unable to predict whether these license agreements can be obtained or renewed on acceptable terms or at all.

If our software products do not remain compatible with ever-changing operating environments, platforms, or third-party products, demand for our products and services could decrease, which could materially adversely affect our business.

The largest suppliers of systems and computing software are, in most cases, the manufacturers of the computer hardware systems used by most of our customers, particularly in the mainframe space. These companies periodically modify or introduce new operating systems, systems software and computer hardware, which could require substantial modification of our products to maintain compatibility with these companies' hardware or software. Additionally, we must continually address the challenges of dynamic and accelerating market trends and competitive developments, such as the emergence of advanced persistent threats in the security space to compete effectively. Customers may require features and capabilities that our current solutions do not have. There can be no assurance that we will be able to adapt our products in response to these developments.

Further, our software solutions interact with a variety of software and hardware developed by third parties. If we lose access to third-party code and specifications for the development of code, this could negatively impact our ability to develop compatible software. In addition, if software providers and hardware manufacturers, including some of our largest vendors, adopt new policies restricting the use or availability of their code or technical documentation for their operating systems, applications, or hardware, or otherwise impose unfavorable terms and conditions for such access, this could result in higher research and development costs for the enhancement and modification of our existing products or development of new products. Any additional restrictions could materially adversely affect our business, financial condition and operating results and cash flow.

Failure to enter into software license agreements on a satisfactory basis could materially adversely affect our business.

Many of our existing customers have multi-year enterprise license agreements, some of which involve substantial aggregate fee amounts. These customers have no contractual obligation to purchase additional solutions. Customer renewal rates may decline or fluctuate as a result of a number of factors, including the level of customer satisfaction with our solutions or customer support, customer budgets and the pricing of our solutions as compared with the solutions offered by our

competitors, any of which may cause our revenue to grow more slowly than expected, if at all. The failure to renew customer agreements of similar scope, on terms that are commercially attractive to us, could materially adversely affect our business, financial condition and operating results and cash flow.

Our sales to government clients subject us to uncertainties regarding fiscal funding approvals, renegotiations or terminations at the discretion of the government, as well as audits and investigations, which could result in litigation, penalties and sanctions including early termination, suspension and debarment.

Our multi-year contracts signed with the U.S. federal government and other U.S. state and local government agencies are generally subject to annual fiscal funding approval and may be renegotiated or terminated at the discretion of the government. Termination, renegotiation or the lack of funding approval for a contract could adversely affect our sales, revenue and reputation. Additionally, our government contracts are generally subject to certain requirements, some of which are generally not present in commercial contracts and/or may be complex, as well as to audits and investigations. Failure to meet contractual requirements could result in various civil and criminal actions and penalties, and administrative sanctions, including termination of contracts, refund of a portion of fees received, forfeiture of profits, suspension of payments, fines and suspensions or debarment from doing business with the government and could materially adversely affect our business, financial condition, operating results and cash flow.

Certain software that we use in our products is licensed from third parties and may not be available to us in the future, which may delay product development and production or cause us to incur additional expense.

Some of our solutions contain software licensed from third parties, some of which may not be available to us in the future on terms that are acceptable to us or allow our products to remain competitive. The loss of these licenses or the inability to maintain any of them on commercially acceptable terms could delay development of future products or the enhancement of existing products.

Certain software we use is from open source code sources, which, under certain circumstances could materially adversely affect our business, financial condition, operating results and cash flow.

Some of our products contain software from open source code sources, the use of which may subject us to certain conditions, including the obligation to offer such products for no cost or to make the proprietary source code of those products publicly available. Further, although some open source vendors provide warranty and support agreements, it is common for such software to be available “as-is” with no warranty, indemnity or support. Although we monitor our use of such open source code to avoid subjecting our products to unintended conditions, such use, under certain circumstances, could materially adversely affect our business, financial condition and operating results and cash flow, including if we are required to take remedial action that may divert resources away from our development efforts.

We are subject to warranty claims, product recalls and product liability.

From time to time, we may be subject to warranty or product liability claims that may in the future lead to significant expense. Our customer contracts typically contain warranty and indemnification provisions, and in certain cases may also contain liquidated damages provisions, relating to product quality issues. The potential liabilities associated with such provisions are significant, and in some cases, including in agreements with some of our largest customers, are potentially unlimited. Any such liabilities may greatly exceed any revenue we receive from the relevant products. Costs, payments or damages incurred or paid by us in connection with warranty and product liability claims and product recalls could materially adversely affect our financial condition and results of operations. We may also be exposed to such claims as a result of any acquisition we may undertake in the future.

Product liability insurance is subject to significant deductibles and there is no guarantee that such insurance will be available or adequate to protect against all such claims, or we may elect to self-insure with respect to certain matters. For example, it is possible for one of our customers to recall a product containing one of our semiconductor devices. In such an event, we may incur significant costs and expenses, including among others, replacement costs, contract damage claims from our customers and reputational harm. Although we maintain reserves for reasonably estimable liabilities and purchase product liability insurance, our reserves may be inadequate to cover the uninsured portion of such claims. Conversely, in some cases, amounts we reserve may ultimately exceed our actual liability for particular claims and may need to be reversed.

The complexity of our products could result in unforeseen delays or expense or undetected defects or bugs, which could adversely affect the market acceptance of new products, damage our reputation with current or prospective customers, and materially and adversely affect our operating costs.

Highly complex products, such as those we offer, may contain defects and bugs when they are first introduced or as new versions, software documentation or enhancements are released, or their release may be delayed due to unforeseen difficulties during product development. If any of our products, including the products of companies we have acquired, or third-party components used in our products, contain defects or bugs, or have reliability, quality or compatibility problems, we

may not be able to successfully design workarounds. Furthermore, if any of these problems are not discovered until after we have commenced commercial production of or deployed a new product, we may be required to incur additional development costs and product recall, repair or replacement costs. Significant technical challenges also arise with our software products because our customers license and deploy our products across a variety of computer platforms and integrate them with a number of third party software applications and databases. As a result, if there is system-wide failure, it may be difficult to determine which product is at fault and we could ultimately be harmed by the failure of another supplier's product. Consequently, our reputation may be damaged and customers may be reluctant to buy our products, which could materially and adversely affect our ability to retain existing customers and attract new customers. To resolve these problems, we may have to invest significant capital and other resources. These problems may also result in claims against us by our customers or others. For example, if a delay in the manufacture and delivery of our products causes the delay of a customer's end-product delivery, we may be required, under the terms of our agreement with that customer, to compensate the customer for the adverse effects of such delays. In addition, if an actual or perceived breach of information integrity, security, or availability occurs in one of our end-user customer's systems, regardless of whether the breach is attributable to our products, the market perception of the effectiveness of our solutions could be harmed. These problems may divert our technical and other resources from other development efforts, and we would likely lose, or experience a delay in, market acceptance of the affected product or products. As a result, our financial results could be materially adversely affected.

We make substantial investments in research and development to enhance existing and develop new technologies to keep pace with technological advances and to remain competitive in our business, and unsuccessful investments could materially adversely affect our business, financial condition and results of operations.

The industries in which we compete are characterized by rapid technological change, changes in customer requirements, frequent new product introductions and enhancements, short product cycles and evolving industry standards, new delivery methods and require substantial investment in our research and development in order to develop and bring to market new and enhanced technologies and products. In addition, semiconductor products transition over time to increasingly smaller line width geometries. This requires us to adapt our products and manufacturing processes to these new technologies, which requires expertise in new procedures. Our failure to successfully transition to smaller geometry process technologies could impair our competitive position. In order to remain competitive, we have made, and expect to continue to make, significant investments in research and development. We expect the dollar amount of research and development expenses to increase for the foreseeable future, due to the increasing complexity and number of products we plan to develop. If we fail to develop new and enhanced products and technologies, if we focus on technologies that do not become widely adopted, or if new competitive technologies that we do not support become widely accepted, demand for our products may be reduced. Significant investments in unsuccessful research and development efforts could materially adversely affect our business, financial condition and results of operations. In addition, increased investments in research and development could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results.

We collect, use, store, or otherwise process personal information, which subjects us to privacy and data security laws and contractual commitments, and our actual or perceived failure to comply with such laws and commitments could harm our business.

We collect, use and store (collectively, "process") a high volume, variety and velocity of certain personal information in connection with the operation of our business, particularly in relation to our Symantec Business. The personal information we process is subject to an increasing number of federal, state, local, and foreign laws regarding privacy and data security, as well as contractual commitments. Any failure or perceived failure by us to comply with such obligations may result in governmental enforcement actions, fines or litigation and could cause our customers to lose trust in us, which could have an adverse effect on our reputation and business.

Privacy legislation, enforcement and policy activity in this area are expanding rapidly in many jurisdictions and creating a complex regulatory compliance environment. The cost of complying with and implementing these privacy-related and data protection measures could be significant. In addition, even our inadvertent failure or perceived failure to comply with federal, state or international privacy-related or data protection laws and regulations could result in proceedings against us by governmental entities or others, and substantial fines and damages. The theft, loss or misuse of personal data collected, used, stored or transferred by us to run our business could result in significantly increased business and security costs or costs related to defending legal claims.

Further, to ensure that its products are continually enhanced to protect against constantly evolving, increasingly sophisticated and wide-spread cyber-threats, NortonLifeLock Inc. relied on threat intelligence gathered from both its consumer business and the Symantec Business. We and NortonLifeLock Inc. have agreed to continue sharing threat intelligence relating to the Symantec Business and the NortonLifeLock Inc. consumer business, respectively, following the closing of the transaction. Failure to continue to receive such threat intelligence could cause the Symantec Business products to become less effective and adversely affect our business.

We are subject to environmental, health and safety laws, which could increase our costs, restrict our operations and require expenditures that could have a material adverse effect on our results of operations and financial condition.

We are subject to a variety of international laws and regulations relating to the use, disposal, clean-up of and human exposure to, hazardous materials. Compliance with environmental, health and safety requirements could, among other things, require us to modify our manufacturing processes, restrict our ability to expand our facilities, or require us to acquire pollution control equipment, all of which can be very costly. Any failure by us to comply with such requirements could result in the limitation or suspension of the manufacture of our products and could result in litigation against us and the payment of significant fines and damages by us in the event of a significant adverse judgment. In addition, complying with any cleanup or remediation obligations for which we are or become responsible could be costly and have a material adverse effect on our business, financial condition and results of operations.

Changing requirements relating to the materials composition of our semiconductor products, including the restrictions on lead and certain other substances in electronics that apply to specified electronics products sold in various countries, including the U.S., China, Japan, and in the European Union, increase the complexity and costs of our product design and procurement operations and may require us to re-engineer our products. Such re-engineering may result in excess inventory or other additional costs and could have a material adverse effect on our results of operations. We may also experience claims from employees from time to time with regard to exposure to hazardous materials or other workplace related environmental claims.

Social and environmental responsibility regulations, policies and provisions, as well as customer demand, may make our supply chain more complex and may adversely affect our relationships with customers.

There is an increasing focus on corporate social and environmental responsibility in the semiconductor industry, particularly with OEMs that manufacture consumer electronics. A number of our customers have adopted, or may adopt, procurement policies that include social and environmental responsibility provisions that their suppliers should comply with, or they may seek to include such provisions in their procurement terms and conditions. An increasing number of participants in the semiconductor industry are also joining voluntary social responsibility initiatives such as the U.N. Global Compact, a voluntary initiative for businesses to develop, implement and disclose sustainability policies and practices. These social and environmental responsibility provisions and initiatives are subject to change, can be unpredictable, and may be difficult and expensive for us to comply with, given the complexity of our supply chain and our significant outsourced manufacturing. If we are unable to comply, or are unable to cause our suppliers or contract manufacturers to comply, with such policies or provisions, a customer may stop purchasing products from us, and may take legal action against us, which could harm our reputation, revenue and results of operations.

In addition, as part of their corporate social and environmental responsibility programs, an increasing number of OEMs are seeking to source products that do not contain minerals sourced from areas where proceeds from the sale of such minerals are likely to be used to fund armed conflicts, such as in the Democratic Republic of Congo. This could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices, including our products. Since our supply chain is complex, we are not currently able to definitively ascertain the origins of all of the minerals and metals used in our products. As a result, we may face difficulties in satisfying these customers' demands, which may harm our sales and operating results.

The average selling prices of semiconductor products in our markets have often decreased rapidly and may do so in the future, which could harm our revenue and gross profit.

The semiconductor products we develop and sell are used for high volume applications. As a result, the prices of those products have often decreased rapidly. Gross profit on our products may be negatively affected by, among other things, pricing pressures from our customers. In the past, we have reduced the average selling prices of our products in anticipation of future competitive pricing pressures, new product introductions by us or our competitors and other factors. In addition, some of our customer agreements provide for volume-based pricing and product pricing roadmaps, which can also reduce the average selling prices of our products over time. Our margins and financial results will suffer if we are unable to offset any reductions in our average selling prices by increasing our sales volumes, reducing manufacturing costs, or developing new and higher value-added products on a timely basis.

A breach of our security systems may have a material adverse effect on our business.

Our security systems are designed to maintain the physical security of our facilities and protect our customers', suppliers' and employees' confidential information, as well as our own proprietary information. However, we are also dependent on a number of third-party cloud-based and other service providers of critical corporate infrastructure services relating to, among other things, human resources, electronic communication services and certain finance functions, and we are, out of necessity, dependent on the security systems of these providers.

Accidental or willful security breaches or other unauthorized access by third parties or our employees or contractors of our facilities, our information systems or the systems of our cloud-based or other service providers, or the existence of computer viruses or malware in our or their data or software could expose us to a risk of information loss and misappropriation of proprietary and confidential information, including information relating to our products or customers and the personal information of our employees. In addition, we have, from time to time, also been subject to unauthorized network intrusions and malware on our own IT networks.

Certain of our software products are intended to manage and secure IT infrastructures and environments, and as a result, we expect these products to be ongoing targets of cybersecurity attacks. Open source code or other third-party software used in these products could also be targeted. Additionally, we use third-party data centers, including for part of our SaaS business, which may also be subject to hacking incidents. Although we continually seek to improve our countermeasures to prevent such incidents, we may be unable to anticipate every scenario and it is possible that certain cyber threats or vulnerabilities will be undetected or unmitigated in time to prevent an attack on us and our customers. Cybersecurity attacks could require significant expenditures of our capital and diversion of our resources. Additionally, efforts by malicious cyber actors or others could cause interruptions, delays or cessation of our product licensing, or modification of our software, which could cause us to lose existing or potential customers. A successful cybersecurity attack involving our products and IT infrastructure could also negatively impact the market perception of their effectiveness.

Any theft or misuse of confidential, personally identifiable or proprietary information could disrupt our business and result in, among other things, unfavorable publicity, damage to our reputation, loss of our trade secrets and other competitive information, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of such information, as well as fines and other sanctions resulting from any related breaches of data privacy regulations (such as the General Data Protection Regulation), any of which could have a material adverse effect on our business, profitability and financial condition. Interruptions in our operations and services or disruptions to the functionality provided by our software, including the operation of our global civilian cyber intelligence threat network, could adversely impact our revenues or cause customers to cease doing business with us. In addition, our business would be harmed if any of the events of this nature caused our customers and potential customers to believe our services are unreliable. Our operations are dependent upon our ability to protect our technology infrastructure against damage from business continuity events that could have a significant disruptive effect on our operations. Since the techniques used to obtain unauthorized access to systems or to otherwise sabotage them, change frequently and are often not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

We are required to assess our internal control over financial reporting on an annual basis and any adverse findings from such assessment could result in a loss of investor confidence in our financial reports, significant expense to remediate any internal control deficiencies and ultimately have an adverse effect on our stock price.

We are required to assess the effectiveness of our internal control over financial reporting annually, as required by Section 404 of the Sarbanes-Oxley Act. Even though, as of November 3, 2019, we concluded that our internal control over financial reporting was effective, we need to maintain our processes and systems and adapt them as our business grows and changes, including to reflect our integration of the Symantec Business, as well as any future acquisitions we may undertake. This continuous process of maintaining and adapting our internal controls and complying with Section 404 is expensive, time consuming and requires significant management attention. We cannot be certain that our internal control measures will continue to provide adequate control over our financial processes and reporting and ensure compliance with Section 404. Furthermore, as we grow our business or acquire other businesses, our internal controls may become more complex and we may require significantly more resources to ensure they remain effective. Failure to implement required new or improved controls, or difficulties encountered in the implementation of such controls, either in our existing business or in businesses that we acquire, could harm our operating results or cause us to fail to meet our reporting obligations. If we or our independent registered public accounting firm identify material weaknesses in our internal controls, the disclosure of that fact, even if quickly remedied, may cause investors to lose confidence in our financial statements and the trading price of our common stock may decline.

Remediation of a material weakness could require us to incur significant expenses and if we fail to remedy any material weakness, our financial statements may be inaccurate, we may be required to restate our financial statements, our ability to report our financial results on a timely and accurate basis may be adversely affected, our access to the capital markets may be restricted, the trading price of our common stock may decline, and we may be subject to sanctions or investigation by regulatory authorities, including the SEC or The Nasdaq Global Select Market.

Current and future accounting pronouncements and other financial reporting standards, especially concerning revenue recognition, may negatively impact our financial results.

Our reported financial results are impacted by the accounting standards promulgated by the SEC and national accounting standards bodies and the methods, estimates and judgments that we use in applying those standards in our accounting policies. New standards, changes to existing standards and changes in their interpretation, have required and, in the future, may require us to change our accounting policies and procedures, or implement new or enhance existing systems. For example, ASU 2014-09, Revenue from Contracts with Customers ("Topic 606") became effective for us starting with fiscal year 2019. In connection with the CA Merger and our changes to CA's business strategy, including our adoption of a policy that allows customers to terminate their CA software contracts for convenience, we have been required to establish revenue recognition accounting policies and procedures under Topic 606 that we believe are appropriate for the business as we intend to conduct it. While we believe our policies and procedures are reasonable and appropriate, they are based on methods, estimates and judgments that are subject to risks, uncertainties, assumptions and changes that could adversely affect our reported financial position and financial results.

Fluctuations in foreign exchange rates could result in losses.

We operate global businesses and our consolidated financial results are reported in U.S. dollars. However, some of the revenue and expenses of our foreign subsidiaries are denominated in local currencies. Fluctuations in foreign exchange rates against the U.S. dollar could result in substantial changes in reported revenues and operating results due to the foreign exchange impact of translating these transactions into U.S. dollars.

In the normal course of business, we employ various hedging strategies to partially mitigate these risks, including the use of derivative instruments. These strategies may not be effective in protecting us against the effects of fluctuations in foreign exchange rates. As a result, fluctuations in foreign exchange rates could result in financial losses.

The enactment of legislation implementing changes in taxation of international business activities, the adoption of other corporate tax reform policies, or changes in tax legislation or policies could materially impact our financial position and results of operations.

Corporate tax reform, base-erosion efforts and tax transparency continue to be high priorities in many tax jurisdictions where we have business operations. As a result, policies regarding corporate income and other taxes in numerous jurisdictions are under heightened scrutiny and tax reform legislation is being proposed or enacted in a number of jurisdictions. For example, the U.S. Tax Cuts and Jobs Act (the "2017 Tax Reform Act") adopted broad U.S. corporate income tax reform, which among other things, reduced the U.S. corporate income tax rate, but imposed base-erosion prevention measures on earnings of non-U.S. subsidiaries of U.S. entities as well as the transition tax on mandatory deemed repatriation of accumulated non-U.S. earnings of U.S. controlled foreign corporations.

In addition, many countries are beginning to implement legislation and other guidance to align their international tax rules with the Organisation for Economic Co-operation and Development's Base Erosion and Profit Shifting recommendations and action plan that aim to standardize and modernize global corporate tax policy, including changes to cross-border tax, transfer pricing documentation rules, and nexus-based tax incentive practices. As a result of the heightened scrutiny of corporate taxation policies, prior decisions by tax authorities regarding treatments and positions of corporate income taxes could be subject to enforcement activities, and legislative investigation and inquiry, which could also result in changes in tax policies or prior tax rulings. Any such changes in policies or rulings may also result in the taxes we previously paid being subject to change.

Any substantial changes in domestic or international corporate tax policies, regulations or guidance, enforcement activities or legislative initiatives may materially adversely affect our business, the amount of taxes we are required to pay and our financial condition and results of operations generally.

If the tax incentives or tax holiday arrangements we have negotiated in Singapore and other jurisdictions change or cease to be in effect or applicable, in part or in whole, for any reason, or if our assumptions and interpretations regarding tax laws and incentives or holiday arrangements prove to be incorrect, the amount of corporate income taxes we have to pay could significantly increase.

Our operations are currently structured to benefit from the various tax incentives and tax holidays extended to us in various jurisdictions to encourage investment or employment. For example, our principal tax incentives from the Singapore Economic Development Board, an agency of the Government of Singapore, provides that any qualifying income we earn in Singapore is subject to tax incentives or reduced rates of Singapore income tax. Absent these tax incentives, the corporate income tax rate that would otherwise apply to our Singapore taxable income would be 17%. These Singapore tax incentives are expected to expire in November 2025, subject to potential extensions, which we may or may not be able to obtain, and any subsequent changes in incentive scope or legislative developments. We also have a tax holiday on our qualifying income in Malaysia, which is scheduled to expire in fiscal year 2028. The tax incentives and tax holiday that we have obtained are also

subject to our compliance with various operating and other conditions and may, in some instances, be amended or terminated prior to their scheduled termination date by the relevant governmental authority. If we cannot, or elect not to, comply with the operating conditions included in any particular tax incentive or tax holiday, we could, in some instances, be required to refund previously realized material tax benefits, or if such tax incentive or tax holiday is terminated prior to its expiration absent a new incentive applying, we will lose the related tax benefits earlier than scheduled. Depending on the incentive at issue, we could also be required to modify our operational structure and tax strategy in order to keep the incentive, which may not be as beneficial to us as the present structure or tax strategy. Our tax incentives and tax holiday, before taking into consideration the effects of the 2017 Tax Reform Act and other indirect tax provisions, increased the benefit from income taxes by approximately $923 million in the aggregate and increased diluted net income per share by $2.20 for fiscal year 2019.

Our interpretations and conclusions regarding the tax incentives are not binding on any taxing authority, and if our assumptions about tax and other laws are incorrect or if these tax incentives are substantially modified or rescinded, we could suffer material adverse tax and other financial consequences, which would increase our expenses, reduce our profitability and adversely affect our cash flows.

Our provision for income taxes and overall cash tax costs are affected by a number of factors, including reorganizations or restructurings of our businesses or assets, jurisdictional revenue mix and changes in tax regulations or policy, and may be further impacted by corporate transactions, all of which could materially, adversely affect financial results.

We are a multinational company subject to tax in various tax jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are many transactions where the ultimate tax determination is uncertain. Additionally, our calculations of income taxes payable currently and on a deferred basis are based on our interpretations of applicable tax laws in the jurisdictions in which we are required to file tax returns.

Our provision for income taxes is subject to volatility and could be adversely affected by numerous factors including:

- reorganization or restructuring of our businesses, tangible and intangible assets, outstanding indebtedness and corporate structure, such as in connection with acquiring businesses;
- jurisdictional mix of our income and assets, and the resulting tax effects of differing tax rates in different countries;
- changes in the allocation of income and expenses, including adjustments related to changes in our corporate structure, acquisitions or tax law;
- changes in transfer pricing rules or methods of applying these rules;
- changes in tax laws, including in the U.S., changes to the taxation of earnings of foreign subsidiaries, the deductibility of expenses attributable to income and foreign tax credit rules;
- tax effects of increases in non-deductible employee compensation;
- changes in tax accounting rules or principles and in the valuation of deferred tax assets and liabilities;
- outcomes of income tax audits; and
- modifications, expiration, lapses or termination of tax credits or incentives.

We have adopted transfer pricing policies between our affiliated entities. Our policies call for the provision of services, the sale of products, the advance of financing and grant of licenses from one affiliate to another at prices that we believe are negotiated on an arm’s length basis. Our taxable income in any jurisdiction is dependent upon acceptance of our operational practices and intercompany transfer pricing by local tax authorities as being on an arm’s length basis. Due to inconsistencies in application of the arm’s length standard among taxing authorities, as well as lack of comprehensive treaty-based protection, transfer pricing challenges by tax authorities could, if successful, result in adjustments for prior or future years. As a result of these adjustments, we could become subject to higher taxes and our earnings and results of operations would be adversely affected in any period in which such determination is made.

Although we believe our tax estimates are reasonable, there is no assurance that the final determination of our income tax liability will not be materially different than what is reflected in our income tax provisions and accruals. Significant judgment is required to determine the recognition and measurement of tax liabilities prescribed in the relevant accounting guidance for uncertainty in income taxes. The accounting guidance for uncertainty in income taxes applies to all income tax positions, which, if resolved unfavorably, could adversely impact our provision for income taxes and our payment obligation with respect to any such taxes.

In addition, we are subject to, and are under, tax audit in various jurisdictions, and such jurisdictions may assess additional income tax against us. Although we believe our tax positions are reasonable, the final determination of tax audits could be materially different from our income tax provisions and accruals. The ultimate result of an audit could have a material adverse effect on our results of operations and cash flows in the period or periods for which that determination is made.

The Internal Revenue Service may not agree that prior to the Redomiciliation Transaction Broadcom-Singapore should have been treated as a foreign corporation for U.S. federal income tax purposes.

Although Broadcom-Singapore is a Singapore entity, the Internal Revenue Service ("IRS") may assert that following our acquisition of BRCM, Broadcom-Singapore should have been treated as a U.S. corporation for U.S. federal income tax purposes pursuant to Section 7874 of the Internal Revenue Code of 1986, as amended (the "Code"). If the IRS were to determine that under Section 7874 of the Code, the former shareholders of BRCM held at least 60% of the vote or value of the ordinary shares of Broadcom-Singapore immediately after our acquisition of BRCM, such percentage referred to as the "Section 7874 Percentage", Broadcom-Singapore would be treated as a "surrogate foreign corporation" and several limitations could then apply to BRCM. For example, BRCM would be prohibited from using its net operating losses, foreign tax credits or other tax attributes to offset the income or gain recognized by reason of the transfer of property to a foreign related person during the 10-year period following our acquisition of BRCM or any income received or accrued during such period by reason of a license of any property by BRCM to a foreign related person. Moreover, in such case, Section 4985 of the Code and rules related thereto would impose an excise tax on the value of certain stock compensation held directly or indirectly by certain BRCM "disqualified individuals" (including former officers and directors of BRCM) at a rate equal to 15%, but only if a gain is otherwise recognized by BRCM former shareholders as a result of our acquisition of BRCM. If the IRS were to determine the Section 7874 Percentage was 80% or more, then Broadcom-Singapore would be treated as a U.S. corporation for U.S. federal income tax purposes.

While we believe the Section 7874 Percentage was significantly less than 60%, determining the Section 7874 Percentage is complex and is subject to factual and legal uncertainties. There can be no assurance that the IRS will agree with our position.

Risks Relating to Our Indebtedness

Our substantial indebtedness could adversely affect our financial health and our ability to raise additional capital to fund our operations or potential acquisitions, could limit our ability to react to changes in the economy or our industry, and exposes us to interest rate risk to the extent of our variable rate indebtedness and prevent us from fulfilling our obligations under our indebtedness.

As of November 3, 2019, our indebtedness under the 2017 Senior Notes, the 2019 Senior Notes and the Assumed CA Senior Notes was $17,550 million, $11,000 million and $1,850 million, respectively. In addition, $1,600 million was outstanding under the 2019 Term Loans. We also borrowed $12 billion of term loans to fund the acquisition of the Symantec Business. We expect to maintain significant levels of indebtedness going forward.

Our substantial indebtedness could have important consequences including:

- increasing our vulnerability to adverse general economic and industry conditions;
- exposing us to interest rate risk due to our variable rate term facilities, which we do not typically hedge against;
- limiting our flexibility in planning for, or reacting to, changes in the economy and the semiconductor industry;
- placing us at a competitive disadvantage compared to our competitors with less indebtedness;
- making it more difficult to borrow additional funds in the future to fund growth, acquisitions, working capital, capital expenditures and other purposes; and
- potentially requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund our other business needs.

In addition, our variable rate indebtedness may use LIBOR as a benchmark for establishing the rate. LIBOR is the subject of recent national, international and other regulatory guidance and proposals for reform. These reforms and other pressures may cause LIBOR to disappear entirely or to perform differently than in the past. The consequences of these developments cannot be entirely predicted, but could include an increase in the cost of our variable rate indebtedness.

We receive debt ratings from the major credit rating agencies in the U.S. Factors that may impact our credit ratings include debt levels, planned asset purchases or sales and near-term and long-term production growth opportunities. Liquidity, asset quality, cost structure, reserve mix and commodity pricing levels could also be considered by the rating agencies. While we are focused on maintaining investment grade ratings from these agencies, we may be unable to do so. Any downgrade in our credit rating or the ratings of our indebtedness, or adverse conditions in the debt capital markets, could:

- adversely affect the trading price of, or market for, our debt securities;
- increase interest expense under our term facilities;
- increase the cost of, and adversely affect our ability to refinance, our existing debt; and
- adversely affect our ability to raise additional debt.

The instruments governing our indebtedness impose certain restrictions on our business.

The instruments governing our indebtedness contain certain covenants imposing restrictions on our business. These restrictions may affect our ability to operate our business, to plan for, or react to, changes in the market conditions or our capital needs and may limit our ability to take advantage of potential business opportunities as they arise. The restrictions placed on us include maintenance of an interest coverage ratio and limitations on our ability to incur certain secured debt, enter into certain sale and lease-back transactions and consolidate, merge, sell or otherwise dispose of all or substantially all of our assets. In addition, the instruments contain customary events of default upon the occurrence of which, after any applicable grace period, the indebtedness could be declared immediately due and payable. In such event, we may not have sufficient available cash to repay such debt at the time it becomes due, or be able to refinance such debt on acceptable terms or at all. Any of the foregoing could materially adversely affect our business, financial condition and results of operations.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

Our ability to make scheduled payments of the principal of, to pay interest on, and to refinance our debt, depends on our future performance, which is subject to economic, financial, competitive and other factors. Our business may not continue to generate cash flow from operations in the future sufficient to satisfy our obligations under our current indebtedness and any future indebtedness we may incur and to make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as reducing or delaying investments or capital expenditures, selling assets, refinancing or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our outstanding indebtedness or future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms when needed, which could result in a default on our indebtedness.

Risks Relating to Owning Our Common Stock

At times, our stock price has been volatile and it may fluctuate substantially in the future, which could result in substantial losses for our investors as well as class action litigation against us and our management which could cause us to incur substantial costs and divert our management's attention and resources.

The trading price of our common stock has, at times, fluctuated significantly and could be subject to wide fluctuations in response to any of the risk factors listed in this "Risk Factors" section, and others, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- issuance of new or updated research or other reports by securities analysts;
- fluctuations in the valuation and results of operations of our significant customers as well as companies perceived by investors to be comparable to us;
- announcements of proposed acquisitions by us or our competitors;
- announcements of, or expectations of, additional debt or equity financing transactions;
- stock price and volume fluctuations attributable to inconsistent trading volume levels of our common stock;
- changes in our dividend or stock repurchase policies or our ability to pay dividends;
- issuance, and subsequent sale, of common stock upon conversion of our 8.00% Mandatory Convertible Preferred Stock, Series A ("Mandatory Convertible Preferred Stock");
- hedging or arbitrage trading activity involving our Mandatory Convertible Preferred Stock or common stock;
- the initiation or conclusion of legal proceedings or government inquiries or investigations involving Broadcom;
- announcement or imposition of restrictive governmental actions, such as import/export restrictions, duties and quotas, trade sanctions or customs duties and tariffs that may affect our business; and
- unsubstantiated news reports or other inaccurate publicity regarding us or our business.

These fluctuations are often unrelated or disproportionate to our operating performance. Broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or currency fluctuations, may negatively impact the market price of our common stock. You may not realize any return on your investment in us and may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. We are also the subject of a number of lawsuits stemming from our acquisitions. Securities litigation against us, including the lawsuits related to such transactions, could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

The amount and frequency of our stock repurchases may fluctuate.

The amount, timing and execution of our stock repurchase program may fluctuate based on our priorities for the use of cash for other purposes. These purposes include operational spending, capital spending, acquisitions, repayment of debt and returning cash to our stockholders as dividend payments. Changes in cash flows, tax laws and our stock price could also impact our stock repurchase program.

A substantial amount of our stock is held by a small number of large investors and significant sales of our common stock in the public market by one or more of these holders could cause our stock price to fall.

As of September 30, 2019, we believe 11 of our 20 largest holders of common stock were active institutional investors who held approximately 33% of our outstanding shares of common stock in the aggregate, with Capital World Investors being our largest stockholder with approximately 11% of our outstanding shares of common stock. These investors may sell their shares at any time for a variety of reasons and such sales could depress the market price of our common stock. In addition, any such sales of our common stock by these entities could also impair our ability to raise capital through the sale of additional equity securities.

There can be no assurance that we will continue to declare cash dividends.

Our Board of Directors has adopted a dividend policy pursuant to which we currently pay a cash dividend on our common stock on a quarterly basis. The declaration and payment of any dividend is subject to the approval of our Board of Directors and our dividend may be discontinued or reduced at any time. In addition, any payment of dividends on our common stock is subject to and conditioned upon our payment of quarterly dividends on our Mandatory Convertible Preferred Stock. There can be no assurance that we will declare cash dividends in the future in any particular amounts, or at all.

Future dividends, if any, and their timing and amount, may be affected by, among other factors: management's views on potential future capital requirements for strategic transactions, including acquisitions; earnings levels; contractual restrictions cash position and overall financial condition; and changes to our business model. The payment of cash dividends is restricted by applicable law, contractual restrictions and our corporate structure. Because we are a holding company, our ability to pay cash dividends is also limited by restrictions or limitations on our ability to obtain sufficient funds through dividends from subsidiaries.

Our actual operating results may differ significantly from our guidance.

From time to time, we release guidance regarding our future performance that represents our management's estimates as of the date of release. This guidance, which consists of forward-looking statements, is prepared by our management and is qualified by, and subject to, the assumptions and the other information contained or referred to in the release. Our guidance is not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither any independent registered public accounting firm nor any other independent expert or outside party compiles, examines or reviews the guidance and, accordingly, no such person expresses any opinion or any other form of assurance with respect thereto.

Guidance is based upon a number of assumptions and estimates that, while presented with numerical specificity, is inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed but are not intended to represent that actual results could not fall outside of these ranges. The principal reason that we release this data is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results, particularly any guidance relating to the results of operations of acquired businesses or companies as our management will, necessarily, be less familiar with their business, procedures and operations. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results will vary from the guidance and the variations may be material. Investors should also recognize

that the reliability of any forecasted financial data will diminish the farther in the future that the data are forecast. In light of the foregoing, investors are urged to put the guidance in context and not to place undue reliance on it.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this Annual Report on Form 10-K could result in the actual operating results being different than the guidance, and such differences may be adverse and material.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We are headquartered in San Jose, California. We conduct our administration, manufacturing, research and development, sales and marketing in both owned and leased facilities. We believe that our owned and leased facilities are adequate for our present operations. We do not identify or allocate assets by operating segment.

As of November 3, 2019, our owned and leased facilities in excess of 100,000 square feet consisted of:

(Square Feet)	United States	Other Countries	Total
Owned facilities [1]	2,590,766	1,067,895	3,658,661
Leased facilities [2]	1,646,583	740,152	2,386,735
Total facilities	4,237,349	1,808,047	6,045,396

[1] Includes 37,352 square feet of property owned in Singapore subject to a 30-year land lease with the state authority expiring in September 2029, subject to renewal at our option. Also includes 318,000 square feet and 153,000 square feet of property owned in Malaysia subject to a 60-year land lease with the state authority expiring in May 2051 and March 2077, respectively, subject to renewal at our option.

[2] Building leases expire on varying dates through March 2038 and generally include renewals at our option.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under Note 13. “Commitments and Contingencies” included in Part II, Item 8. of this Annual Report on Form 10-K, is incorporated herein by reference. For an additional discussion of certain risks associated with legal proceedings, see “Risk Factors” above.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER SALE AND PURCHASES OF EQUITY SECURITIES

Market Information

Broadcom common stock is listed on The Nasdaq Global Select Market under the symbol "AVGO".

Holders

As of November 29, 2019, there were 715 holders of record of our common stock. A substantially greater number of stockholders are "street name" or beneficial holders, whose shares are held of record by banks, brokers and other financial institutions.

Dividends and Distributions

On December 10, 2019, our Board of Directors declared a quarterly cash dividend of $3.25 per share, payable on December 31, 2019 to common stockholders of record on December 23, 2019. Broadcom paid aggregate cash dividends and distributions of $4,235 million and $2,998 million in fiscal years 2019 and 2018, respectively.

Issuer Purchases of Equity Securities

On December 5, 2018, our Board of Directors authorized an increase to our previously authorized $12 billion stock repurchase program to a total of $18 billion. This authorization ended on November 3, 2019.

The following table presents details of our various repurchases during the fiscal quarter ended November 3, 2019:

Period	Total Number of Shares Purchased [(a)]	Average Price per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan [(a)]	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plan
		(In millions, except per share data)		
August 5, 2019 — September 1, 2019	1	$ 276.60	1	$ 5,454
September 2, 2019 — September 29, 2019	1	$ 288.09	1	$ 5,307
September 30, 2019 — November 3, 2019	—	$ —	—	$ —
Total	2	$ 280.39	2	

Repurchases under our stock repurchase program were effected through a variety of methods, including open market or privately negotiated purchases in compliance with Rule 10b-18 promulgated under the Exchange Act, which included purchases under plans complying with Rule 10b5-1 of the Exchange Act. The timing and number of shares of common stock repurchased depended on a variety of factors, including price, general business and market conditions and alternative investment opportunities. We were not obligated to repurchase any specific number of shares of common stock.

____

(a) We also paid approximately $154 million in employee withholding taxes due upon the vesting of, and related to net settled equity awards. We withheld approximately 1 million shares of common stock from employees in connection with such net share settlement at an average price of $287.90 per share. These shares may be deemed to be "issuer purchases" of shares and are not included in this table.

Stock Performance Graph

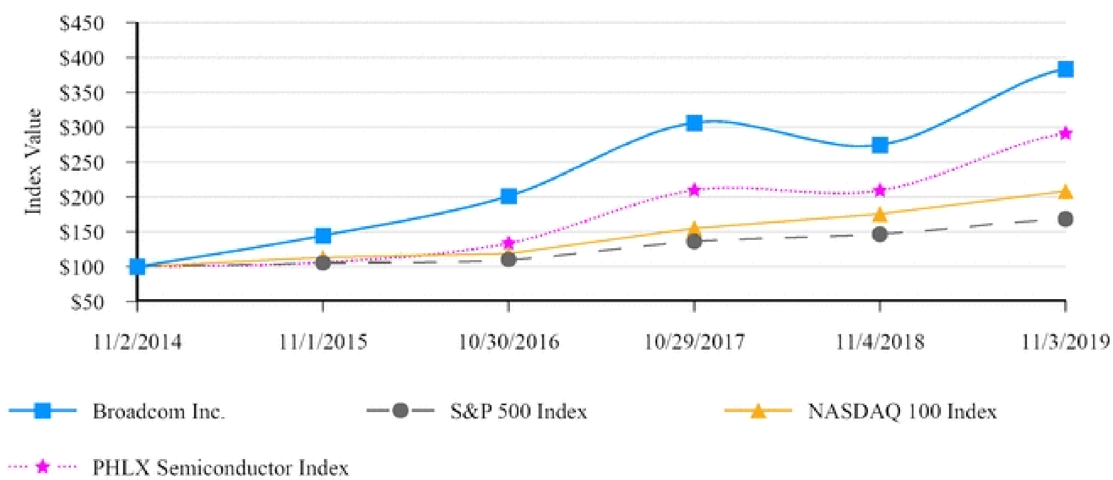
The following graph shows a comparison of cumulative total return for our common stock, the Standard & Poor's 500 Stock Index (the "S&P 500 Index"), the NASDAQ 100 Index, and the Philadelphia Semiconductor Index (the "PHLX Semiconductor Index") for the five fiscal years ended November 3, 2019. The total return graph and table assume that $100 was invested on October 31, 2014 (the last trading day of our fiscal year 2014) in each of Broadcom Inc. common stock, the S&P 500 Index, the NASDAQ 100 Index and the PHLX Semiconductor Index and assume all dividends are reinvested. Indexes are calculated on a month-end basis.

The PHLX Semiconductor Index was presented as a comparison in our 2018 Annual Report on Form 10-K stock performance graph. We have added the NASDAQ 100 Index as we consider it to be more representative than the PHLX Semiconductor Index. The NASDAQ 100 Index includes the largest domestic and international non-financial companies listed on The NASDAQ Stock Market based on market capitalization.

The comparisons in the graph below are based on historical data and are not indicative of, or intended to forecast, the possible future performance of our common stock.

Comparison of Five Year Cumulative Total Return

Among Broadcom Inc., the S&P 500 Index, the NASDAQ 100 Index and the PHLX Semiconductor Index



	November 2, 2014	November 1, 2015	October 30, 2016	October 29, 2017	November 4, 2018	November 3, 2019
Broadcom Inc.	$ 100.00	$ 144.55	$ 201.30	$ 306.27	$ 274.86	$ 383.76
S&P 500 Index	$ 100.00	$ 105.20	$ 109.96	$ 136.22	$ 146.54	$ 168.44
NASDAQ 100 Index	$ 100.00	$ 113.14	$ 118.47	$ 154.97	$ 175.57	$ 208.03
PHLX Semiconductor Index	$ 100.00	$ 105.91	$ 133.45	$ 209.43	$ 209.14	$ 291.03

The graph and the table above shall not be deemed "filed" with the SEC for the purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing made by us with the SEC, regardless of any general incorporation language in such filing.

Securities Authorized for Issuance Under Equity Compensation Plans

The information required by this item regarding securities authorized for issuance under equity compensation plans is incorporated herein by reference to the definitive Proxy Statement for our 2020 annual meeting of stockholders to be filed with the SEC within 120 days after the end of fiscal year 2019.

ITEM 6. SELECTED FINANCIAL DATA

The following table sets forth the selected consolidated financial data for Broadcom and should be read in conjunction with our annual consolidated financial statements and related notes and information included under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K.

Summary of Five Year Selected Financial Data

	Fiscal Year Ended (1)				
	November 3, 2019	November 4, 2018	October 29, 2017	October 30, 2016	November 1, 2015
	(In millions, except per share data)				
Statement of Operations Data: (2)					
Total net revenue (3)	$ 22,597	$ 20,848	$ 17,636	$ 13,240	$ 6,824
Gross margin (4) (5)	$ 12,483	$ 10,733	$ 8,509	$ 5,940	$ 3,550
Operating expenses (4) (5) (6)	$ 9,039	$ 5,598	$ 6,138	$ 6,356	$ 1,935
Income (loss) from continuing operations before income taxes	$ 2,226	$ 4,545	$ 1,825	$ (1,107)	$ 1,467
Provision for (benefit from) income taxes (7)	$ (510)	$ (8,084)	$ 35	$ 642	$ 76
Income (loss) from continuing operations	$ 2,736	$ 12,629	$ 1,790	$ (1,749)	$ 1,391
Net income (loss)	$ 2,724	$ 12,610	$ 1,784	$ (1,861)	$ 1,364
Net income (loss) attributable to common stock	$ 2,695	$ 12,259	$ 1,692	$ (1,739)	$ 1,364
Diluted income (loss) per share:					
Income (loss) per share from continuing operations	$ 6.46	$ 28.48	$ 4.03	$ (4.57)	$ 4.95
Loss per share from discontinued operations	(0.03)	(0.04)	(0.01)	(0.29)	(0.10)
Net income (loss) per share	$ 6.43	$ 28.44	$ 4.02	$ (4.86)	$ 4.85
Cash dividends declared and paid per share	$ 10.60	$ 7.00	$ 4.08	$ 1.94	$ 1.55

	November 3, 2019	November 4, 2018	October 29, 2017	October 30, 2016	November 1, 2015
	(In millions)				
Balance Sheet Data: (2)					
Cash and cash equivalents	$ 5,055	$ 4,292	$ 11,204	$ 3,097	$ 1,822
Total assets	$ 67,493	$ 50,124	$ 54,418	$ 49,966	$ 10,515
Debt and capital lease obligations	$ 32,798	$ 17,493	$ 17,569	$ 13,642	$ 3,872
Total equity	$ 24,970	$ 26,657	$ 23,186	$ 21,876	$ 4,714

____

(1) Our fiscal year ends on the Sunday closest to October 31 in a 52-week year and on the first Sunday in November in a 53-week year. Our fiscal year ended November 4, 2018 was a 53-week fiscal year. All other fiscal years presented included 52 weeks.

(2) On November 5, 2018, we acquired CA for total consideration of approximately $18.8 billion. On November 17, 2017, we acquired Brocade for total consideration of approximately $6.0 billion. On February 1, 2016, we acquired BRCM for total consideration of approximately $35.7 billion. On May 5, 2015, we acquired Emulex Corporation for total consideration of approximately $587 million. Our financial statements included the results of operations of the acquired companies and estimated fair value of assets acquired and liabilities assumed commencing as of their respective acquisition dates.

(3) During fiscal year 2019, we adopted Topic 606. Periods prior to fiscal year 2019 are presented in accordance with Accounting Standards Codification 605, Revenue Recognition. Refer to Note 3. "Revenue from Contracts with Customers" included in Part II, Item 8. for additional information on our adoption of Topic 606.

(4) We incurred acquisition-related costs and restructuring charges which were presented as part of both cost of products sold and operating expenses. Restructuring charges primarily reflect actions taken to implement planned cost reduction and restructuring activities in connection with each acquisition.

(5) During fiscal year 2019, we adopted Accounting Standards Update 2017-07 *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost* using a permitted practical expedient that uses the amounts disclosed in the pension and other post-retirement benefit plans note for the prior comparative periods as the estimation basis for applying the retrospective presentation requirements. As a result of the adoption of this standard, gross margin and operating expenses have been restated for prior fiscal years presented, as applicable.

(6) In connection with our acquisition of CA in fiscal year 2019, amortization of acquisition-related intangible assets increased $1,357 million contributing to 39% of the overall increase in operating expenses for fiscal year 2019. In connection with our acquisition of BRCM in fiscal year 2016, amortization of acquisition-related intangible assets increased $1,624 million contributing to over 30% of the overall increase in operating expenses for fiscal year 2016.

(7) Our benefit from income taxes for fiscal year 2019 was primarily due to the recognition of gross uncertain tax benefits as a result of audit settlements in various jurisdictions and excess tax benefits from stock-based awards that vested or were exercised during the year. Our benefit from income taxes for fiscal year 2018 was primarily a result of the enactment of the 2017 Tax Reform Act and the Redomiciliation Transaction. For fiscal years 2017, 2016, and 2015, our provision for income taxes fluctuated mainly due to changes in the jurisdictional mix of income.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with "Selected Financial Data" and our consolidated financial statements and notes thereto which appear elsewhere in this Annual Report on Form 10-K. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under the caption "Risk Factors" or in other parts of this Annual Report on Form 10-K.

Overview

We are a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. We develop semiconductor devices with a focus on complex digital and mixed signal complementary metal oxide semiconductor based devices and analog III-V based products. We have a history of innovation in the semiconductor industry and offer thousands of products that are used in end products such as enterprise and data center networking, home connectivity, set-top boxes, broadband access, telecommunication equipment, smartphones and base stations, data center servers and storage systems, factory automation, power generation and alternative energy systems, and electronic displays. Our infrastructure software solutions enable customers to plan, develop, automate, manage, and secure applications across mainframe, distributed, mobile, and cloud platforms. Through our fiscal year ended November 3, 2019 ("fiscal year 2019"), we had three reportable segments: semiconductor solutions, infrastructure software and intellectual property ("IP") licensing.

Our strategy is to combine best-of-breed technology leadership in semiconductor and infrastructure software solutions, with unmatched scale, on a common sales and administrative platform to deliver a comprehensive suite of infrastructure technology products to the world's leading business and government customers. We seek to achieve this through responsibly financed acquisitions of category-leading businesses and technologies, as well as investing extensively in research and development, to ensure our products retain their technology leadership. This strategy results in a robust business model designed to drive diversified and sustainable operating and financial results.

The demand for our products has been affected in the past, and is likely to continue to be affected in the future, by various factors, including the following:

- gain or loss of significant customers;
- general economic and market conditions in the industries and markets in which we compete;
- our distributors' product inventory and end customer demand;
- the rate at which our present and future customers and end-users adopt our products and technologies in our target markets, and the rate at which our customers' products that include our technology are accepted in their markets;
- the shift to cloud-based IT solutions and services, such as hyperscale computing, which may adversely affect the timing and volume of sales of our products for use in traditional enterprise data centers; and
- the timing, rescheduling or cancellation of expected customer orders.

Uncertainty in global economic conditions poses significant risks to our business. For example, customers may defer purchases in response to tighter credit and negative financial news, which would in turn adversely affect product demand and our results of operations.

Our fiscal year 2019 and our fiscal year ended October 29, 2017 ("fiscal year 2017") were 52-week fiscal years compared to our fiscal year ended November 4, 2018 ("fiscal year 2018"), which was a 53-week fiscal year. The additional week in the first quarter of fiscal year 2018 resulted in higher net revenue, gross margin dollars, research and development expense, and selling general and administrative expense for fiscal year 2018, compared to fiscal years 2019 and 2017.

Fiscal Year Highlights

Highlights during fiscal year 2019 include the following:

- On September 30, 2019, we completed an offering of approximately 4 million shares of 8.00% Mandatory Convertible Preferred Stock, Series A, $0.001 par value per share (the "Mandatory Convertible Preferred Stock"), which generated net proceeds of $3,679 million. We used the net proceeds, together, with cash on hand, to repay $4.8 billion of our long-term debt.
- We generated $9,697 million of cash from operations.

- We paid $5,435 million to repurchase shares of our common stock under our stock repurchase program, $4,235 million for cash dividends and distributions and $972 million in employee withholding taxes related to net share settled equity awards.
- On November 5, 2018, we completed the acquisition of CA, Inc. ("CA") for aggregate consideration of approximately $18.8 billion.

Recent Developments

Purchase of Symantec Corporation's Enterprise Security Business

On November 4, 2019, we completed the purchase and assumption of certain assets and certain liabilities, respectively, of Symantec Corporation's Enterprise Security business ("Symantec Business") for approximately $10.7 billion in cash (the "Symantec Asset Purchase").

In connection with the Symantec Asset Purchase, we entered into a credit agreement with certain financial institutions to provide (i) up to $12 billion in term loans to fund the Symantec Asset Purchase and related working capital needs and (ii) $3.5 billion in term loans to refinance certain existing senior notes maturing in the first quarter of our fiscal year ending November 1, 2020 ("fiscal year 2020").

The discussions below relate to our business, reporting segments and financial results for fiscal year 2019 and prior periods and do not include any impact from or information relating to the Symantec Asset Purchase.

Acquisitions and Divestitures

The discussion and analysis in this section and the accompanying consolidated financial statements include the results of operations of acquired companies commencing on their respective acquisition dates.

Acquisition of CA, Inc.

On November 5, 2018 (the "CA Acquisition Date"), we acquired CA for approximately $18.8 billion in aggregate cash purchase consideration and assumed $2.25 billion of outstanding unsecured bonds (the "CA Merger"). We financed the CA Merger with $18 billion of term loans borrowed on the CA Acquisition Date, as well as cash on hand of the combined companies. See Note 9. "Borrowings" included in Part II, Item 8. of this Annual Report on Form 10-K for further detail. We also assumed all eligible unvested CA equity awards in the transaction. On December 31, 2018, we sold Veracode, Inc. ("Veracode"), a subsidiary of CA and provider of application security testing solutions, to Thoma Bravo, LLC for cash consideration of $950 million, before working capital adjustments.

Acquisition of Brocade Communications Systems, Inc.

On November 17, 2017, we acquired Brocade Communications Systems, Inc. ("Brocade") for approximately $6.0 billion in cash, including retirement of their term loan debt (the "Brocade Merger"), which we financed using the net proceeds from the issuance of our senior unsecured notes, issued in October 2017, as well as cash on hand. We also assumed all eligible unvested Brocade equity awards in the transaction. On December 1, 2017, we sold certain Brocade businesses for an aggregate of $800 million in cash.

Net Revenue

A majority of our net revenue is derived from sales of a broad range of semiconductor devices that are incorporated into electronic products, as well as from modules, switches and subsystems. Net revenue is also generated from the sale of software solutions that enable our customers to plan, develop, automate, manage, and secure applications across mainframe, distributed, mobile, and cloud platforms. Our three reportable segments in fiscal year 2019 were: semiconductor solutions, infrastructure software and IP licensing.

Our overall net revenue, as well as the percentage of total net revenue generated by sales in our semiconductor solutions and infrastructure software segments, has varied from quarter to quarter, due largely to fluctuations in end-market demand, including the effects of seasonality, which are discussed in detail in Part I, Item 1. *Business* under "Seasonality" of this Annual Report on Form 10-K.

Original equipment manufacturers ("OEMs"), or their contract manufacturers, and distributors typically account for the substantial majority of our semiconductor sales. To serve customers around the world, we have strategically developed relationships with large global electronic component distributors, complemented by a number of regional distributors with customer relationships based on their respective product ranges. We also sell our products to a wide variety of OEMs or their contract manufacturers. We have established strong relationships with leading OEM customers across multiple target markets. Our direct sales force focuses on supporting our large OEM customers and has specialized product and service knowledge that enables us to sell specific offerings at key levels throughout a customer's organization. Certain customers require us to contract with them directly and with specified intermediaries, such as contract manufacturers. Many of our major customer

relationships have been in place for many years and are often the result of years of collaborative product development. This has enabled us to build our extensive IP portfolio and develop critical expertise regarding our customers' requirements, including substantial system-level knowledge. This collaboration has provided us with key insights into our customers' businesses and has enabled us to be more efficient and productive and to better serve our target markets and customers. We recognize revenue upon delivery of product to the distributors, which can cause our quarterly net revenue to fluctuate significantly. Such revenue is reduced for estimated returns and distributor allowances.

Our traditional software customers generally consist of large enterprises that have computing environments from multiple vendors and are highly complex. We believe our enterprise-wide license model will continue to offer our customers reduced complexity, more flexibility and an easier renewal process that will help drive revenue growth.

Costs and Expenses

Cost of products sold. Cost of products sold consists primarily of the costs for semiconductor wafers and other materials as well as the costs of assembling and testing those products and materials. Such costs include personnel and overhead related to our manufacturing operations, which include stock-based compensation expense; related occupancy; computer services; equipment costs; manufacturing quality; order fulfillment; warranty adjustments; inventory adjustments, including write-downs for inventory obsolescence; and acquisition costs, which include direct transaction costs and integration-related costs.

Although we outsource a significant portion of our manufacturing activities, we do have some proprietary semiconductor fabrication facilities. If we are unable to utilize our owned fabrication facilities at a desired level, the fixed costs associated with these facilities will not be fully absorbed, resulting in higher average unit costs and lower gross margins.

Cost of subscriptions and services. Cost of subscriptions and services consists of personnel, project costs associated with professional services or support of our subscriptions and services revenue, and allocated facilities costs and other corporate expenses. Personnel costs include stock-based compensation expense.

Total cost of revenue also includes the purchase accounting effect on inventory, amortization of acquisition-related intangible assets and restructuring charges.

Research and development. Research and development expense consists primarily of personnel costs for our engineers engaged in the design and development of our products and technologies, including stock-based compensation expense. These expenses also include project material costs, third-party fees paid to consultants, prototype development expense, allocated facilities costs and other corporate expenses and computer services costs related to supporting computer tools used in the engineering and design process.

Selling, general and administrative. Selling expense consists primarily of compensation and associated costs for sales and marketing personnel, including stock-based compensation expense, sales commissions paid to our independent sales representatives, advertising costs, trade shows, corporate marketing, promotion, travel related to our sales and marketing operations, related occupancy and equipment costs, and other marketing costs. General and administrative expense consists primarily of compensation and associated costs for executive management, finance, human resources and other administrative personnel, including stock-based compensation expense, outside professional fees, allocated facilities costs, acquisition-related costs and other corporate expenses.

Amortization of acquisition-related intangible assets. In connection with our acquisitions, we recognize intangible assets that are being amortized over their estimated useful lives of 1 year to 25 years. We also recognize goodwill, which is not amortized, and in-process research and development ("IPR&D"), which is initially capitalized as an indefinite-lived intangible asset, in connection with acquisitions. Upon completion of each underlying project, IPR&D assets are reclassified as an amortizable purchased intangible asset and amortized over their estimated useful lives.

Restructuring, impairment and disposal charges. Restructuring, impairment and disposal charges consist primarily of compensation costs associated with employee exit programs, alignment of our global manufacturing operations, rationalizing product development program costs, IPR&D impairment, fixed asset impairment, facility and lease abandonments, and other exit costs, including curtailment of service or supply agreements.

Interest expense. Interest expense includes coupon interest, commitment fees, accretion of original issue discount, and amortization of debt premiums and debt issuance costs, and expenses related to debt modification.

Other income, net. Other income, net includes interest income, gains (losses) on investments and on foreign currency remeasurement, and other miscellaneous items.

Provision for (benefit from) income taxes. The U.S. Tax Cuts and Jobs Act ("2017 Tax Reform Act") made significant changes to the U.S. Internal Revenue Code, including (1) a decrease in the U.S. corporate tax rate from 35% to 21% effective for tax years beginning after December 31, 2017, (2) the accrual of U.S. income tax on foreign earnings when earned, allowing

certain foreign dividends to then be tax-exempt, rather than deferring such income tax payments until the foreign earnings are repatriated into the U.S., and (3) the transition tax on the mandatory deemed repatriation of accumulated non-U.S. earnings of U.S. controlled foreign corporations (the "Transition Tax"). Following the enactment of the 2017 Tax Reform Act, the Securities and Exchange Commission ("SEC"), issued guidance for situations when there is insufficient information to complete the accounting for certain income tax effects of the 2017 Tax Reform Act. Based on our interpretation of the 2017 Tax Reform Act and the SEC's guidance, we recognized an income tax benefit of $7,278 million during fiscal year 2018. During fiscal year 2019 we recorded an income tax provision of $113 million from a change in estimate of our fiscal year 2018 benefit as a result of proposed U.S. Treasury regulations issued in fiscal year 2019 related to the 2017 Tax Reform Act. We also recognized an income tax benefit of $1,162 million in fiscal year 2018 primarily as a result of our redomiciliation to the United States in April 2018 (the "Redomiciliation Transaction").

We have structured our operations to maximize the benefit from tax incentives extended to us in various jurisdictions to encourage investment or employment. Our tax incentives from the Singapore Economic Development Board, an agency of the Government of Singapore, provide that any qualifying income earned in Singapore is subject to tax incentives or reduced rates of Singapore income tax. Subject to our compliance with the conditions specified in these incentives and legislative developments, these Singapore tax incentives are presently expected to expire in November 2025, subject in certain cases to potential extensions, which we may or may not be able to obtain. Absent these tax incentives, the corporate income tax rate in Singapore that would otherwise apply to us would be 17%. We also have a tax holiday on our qualifying income in Malaysia, which is scheduled to expire in fiscal year 2028.

The tax incentives and tax holiday that we have obtained are also subject to our compliance with various operating and other conditions. If we cannot, or elect not to, comply with the operating conditions included in any particular tax incentive, we will lose the related tax benefits and we could be required to refund previously realized material tax benefits. Depending on the incentive at issue, we could also be required to modify our operational structure and tax strategy, which may not be as beneficial to us as the benefits provided under the present tax concession arrangements. Before taking into consideration the effects of the 2017 Tax Reform Act and other indirect tax impact, the effect of these tax incentives and tax holiday was to increase the benefit from income taxes by approximately $923 million and $590 million for fiscal years 2019 and 2018, respectively. For fiscal year 2017, the effect of these tax incentives and tax holiday was to reduce the overall provision for income taxes by approximately $237 million.

Our interpretations and conclusions regarding the tax incentives are not binding on any taxing authority, and if our assumptions about tax and other laws are incorrect or if these tax incentives are substantially modified or rescinded we could suffer material adverse tax and other financial consequences, which would increase our expenses, reduce our profitability and adversely affect our cash flows. In addition, taxable income in any jurisdiction is dependent upon acceptance of our operational practices and intercompany transfer pricing by local tax authorities as being on an arm's length basis. Due to inconsistencies in application of the arm's length standard among taxing authorities, as well as lack of adequate treaty-based protection, transfer pricing challenges by tax authorities could, if successful, substantially increase our income tax expense.

Critical Accounting Estimates

The preparation of financial statements in accordance with generally accepted accounting principles in the United States ("GAAP") requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We base our estimates and assumptions on current facts, historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the accrual of costs and expenses that are not readily apparent from other sources. Our actual financial results may differ materially and adversely from our estimates. Our critical accounting policies are those that affect our historical financial statements materially and involve difficult, subjective or complex judgments by management. Those policies include revenue recognition, business combinations, valuation of long-lived assets, intangible assets and goodwill, inventory valuation, income taxes, retirement and post-retirement benefit plan assumptions, stock-based compensation and employee bonus programs. See Note 2. "Summary of Significant Accounting Policies" included in Part II, Item 8. of this Annual Report on Form 10-K for further information on our critical accounting policies and estimates.

Revenue recognition. We account for a contract with a customer when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable we will collect substantially all of the consideration we are entitled to. Revenue is recognized when, or as, performance obligations are satisfied by transferring control of a promised product or service to a customer. Our products and services can be broadly categorized as sales of products and subscriptions and services.

We recognize products revenue from sales to direct customers and distributors when control transfers to the customer. An allowance for distributor credits covering price adjustments is made based on our estimate of historical experience rates as well as considering economic conditions and contractual terms. To date, actual distributor claims activity has been materially consistent with the provisions we have made based on our historical estimates. However, because of the inherent nature of estimates, there is always a risk that there could be significant differences between actual amounts and our estimates. Different judgments or estimates could result in variances that might be significant to reported operating results. We also record reductions of revenue for rebates in the same period that the related revenue is recorded. We accrue 100% of potential rebates at the time of sale. We reverse the accrual of unclaimed rebate amounts as specific rebate programs contractually end and when we believe unclaimed rebates are no longer subject to payment and will not be paid. Thus, the reversal of unclaimed rebates may have a positive impact on our net revenue and net income in subsequent periods.

Our contracts may contain more than one of our products and services, each of which is separately accounted for as a distinct performance obligation. When available, we use directly observable transactions to determine the standalone selling prices for performance obligations. Our estimates of standalone selling price for each performance obligation require judgment that considers multiple factors, including, but not limited to, historical discounting trends for products and services and pricing practices through different sales channels, gross margin objectives, internal costs, competitor pricing strategies, technology lifecycles and market conditions.

We also estimate the standalone selling price of our material rights. Our estimate of the value of the customer’s option to purchase or receive additional products or services at a discounted price includes estimating the incremental discount the customer would obtain when exercising the option and the likelihood that the option would be exercised.

Certain contracts contain a right of return that allows the customer to cancel all or a portion of the product or service and receive a credit. We estimate returns based on historical returns data which is constrained to an amount for which a material revenue reversal is not probable. We do not recognize revenue for products or services that are expected to be returned.

Business combinations. Accounting for business combinations requires management to make significant estimates and assumptions, especially at the acquisition date, for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based, in part, on historical experience and information obtained from management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets we have acquired include, but are not limited to, future expected cash flows from product sales, customer contracts and acquired technologies, expected costs to develop IPR&D into commercially viable products, estimated cash flows from the projects when completed, and discount rates. The discount rates used to discount expected future cash flows to present value are typically derived from a weighted-average cost of capital analysis and adjusted to reflect inherent risks. Unanticipated events and circumstances may occur that could affect either the accuracy or validity of such assumptions, estimates or actual results.

Valuation of goodwill and long-lived assets. We perform an annual impairment review of our goodwill during the fourth fiscal quarter of each year, and more frequently if we believe indicators of impairment exist. The process of evaluating the potential impairment of goodwill is highly subjective and requires significant judgment. To review for impairment, we first assess qualitative factors to determine whether events or circumstances lead to a determination that it is more-likely-than-not that the fair value of any of our reporting units is less than its carrying amount. Our qualitative assessment of the recoverability of goodwill, whether performed annually or based on specific events or circumstances, considers various macroeconomic, industry-specific and company-specific factors. These factors include: (i) severe adverse industry or economic trends; (ii) significant company-specific actions, including exiting an activity in conjunction with restructuring of operations; (iii) current, historical or projected deterioration of our financial performance; or (iv) a sustained decrease in our market capitalization below our net book value. After assessing the totality of events and circumstances, if we determine that it is not more-likely-than-not that the fair value of any of our reporting units is less than its carrying amount, no further assessment is performed. If we determine that it is more likely than not that the fair value of any of our reporting units is less than its carrying amount, we calculate the fair value of that reporting unit and compare the fair value to the reporting unit’s net book value.

Determining the fair value of a reporting unit involves the use of significant estimates and assumptions. Our goodwill impairment test uses both the income approach and the market approach to estimate a reporting unit's fair value. The income approach is based on the discounted cash flow method that uses the reporting unit estimates for forecasted future financial performance including revenues, operating expenses, and taxes, as well as working capital and capital asset requirements. These estimates are developed as part of our long-term planning process based on assumed market segment growth rates and our assumed market segment share, estimated costs based on historical data and various internal estimates. Projected cash flows are then discounted to a present value employing a discount rate that properly accounts for the estimated market

weighted-average cost of capital, as well as any risk unique to the subject cash flows. The market approach is based on weighting financial multiples of comparable companies and applies a control premium. A reporting unit's carrying value represents the assignment of various assets and liabilities, excluding certain corporate assets and liabilities, such as cash and debt.

We assess the impairment of long-lived assets including purchased IPR&D, property, plant and equipment, and intangible assets, whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important which could trigger an impairment review include (i) significant under-performance relative to historical or projected future operating results, (ii) significant changes in the manner of our use of the acquired assets or the strategy for our overall business, or (iii) significant negative industry or economic trends. The process of evaluating the potential impairment of long-lived assets under the accounting guidance on property, plant and equipment and other intangible assets is also highly subjective and requires significant judgment. In order to estimate the fair value of long-lived assets, we typically make various assumptions about the future prospects of our business or the part of our business that the long-lived asset relates to. We also consider market factors specific to the business and estimate future cash flows to be generated by the business, which requires significant judgment as it is based on assumptions about market demand for our products over a number of future years. Based on these assumptions and estimates, we determine whether we need to take an impairment charge to reduce the value of the long-lived asset stated on our consolidated balance sheet to reflect its estimated fair value. Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors, such as the real estate market, industry and economic trends, and internal factors, such as changes in our business strategy and our internal forecasts. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, changes in assumptions and estimates could materially impact our reported financial results.

Inventory valuation. We regularly review inventory quantities on hand and record a provision for excess and obsolete inventory based primarily on our forecast of product demand and production requirements. Demand for our products can fluctuate significantly from period to period. A significant decrease in demand could result in an increase in the amount of excess inventory quantities on hand. In addition, our industry is characterized by rapid technological change, frequent new product development and rapid product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Additionally, our estimates of future product demand may prove to be inaccurate, which may cause us to understate or overstate both the provision required for excess and obsolete inventory and cost of products sold. Therefore, although we make every effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of our inventory and our results of operations.

Income taxes. Significant management judgment is required in developing our provision for income taxes, including the determination of deferred tax assets and liabilities and any valuation allowances that might be required against the deferred tax assets. We have considered projected future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for valuation allowances. If we determine that a valuation allowance is required, such adjustment to the deferred tax assets would increase our tax expense in the period in which such determination is made. Conversely, if we determine that a valuation allowance exceeds our requirement, such adjustment to the deferred tax assets would decrease tax expense in the period in which such determination is made. In evaluating the exposure associated with various tax filing positions, we accrue an income tax liability when such positions do not meet the more-likely-than-not threshold for recognition.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax law and regulations in a multitude of jurisdictions. We recognize potential liabilities for anticipated tax audit issues in the U.S. and other tax jurisdictions based on our estimate of whether, and the extent to which, additional taxes, interest and penalties will be due. If our estimate of income tax liabilities proves to be less than the actual amount ultimately assessed, a further charge to tax expense would be required. If the payment of these amounts ultimately proves to be unnecessary, the reversal of the accrued liabilities would result in tax benefits being recognized in the period when we determine the liabilities no longer exist.

Retirement and post-retirement benefit plan assumptions. Retirement and post-retirement benefit plan costs represent obligations that will ultimately be settled sometime in the future and therefore, are subject to estimation. Pension accounting is intended to reflect the recognition of future retirement and post-retirement benefit plan costs over the employees' average expected future service to us, based on the terms of the plans and investment and funding decisions. To estimate the impact of these future payments and our decisions concerning funding of these obligations, we are required to make assumptions using actuarial concepts within the framework of GAAP. One assumption is the discount rate used to calculate the estimated costs. Other assumptions include the expected long-term return on plan assets, expected future salary increases, the health care cost trend rate, expected future increases to benefit payments, expected retirement dates, employee turnover, retiree mortality rates, and portfolio composition. We evaluate these assumptions at least annually.

The discount rate is used to determine the present value of future benefit payments at the relevant measurement dates — November 3, 2019 and November 4, 2018, for both U.S. and non-U.S. plans, in fiscal years 2019 and 2018, respectively. The U.S. discount rates are based on the results of matching expected plan benefit payments with cash flows from a hypothetical yield curve constructed with high-quality corporate bond yields. The discount rate for non-U.S. plans was based either on published rates for government bonds or use of a hypothetical yield curve constructed with high-quality corporate bond yields, depending on the availability of sufficient quantities of quality corporate bonds. Lower discount rates increase present values of the pension liabilities and subsequent year pension expense; higher discount rates decrease present values of the pension liabilities and subsequent year pension expense.

The U. S. expected rate of return on plan assets is set equal to the discount rate due to the implementation of our fully-matched, liability-driven investment strategy.

Actuarial assumptions are based on our best estimates and judgment. Material changes may occur in retirement benefit costs in the future if these assumptions differ from actual events or experience. We performed a sensitivity analysis on the discount rate, which is the key assumption in calculating U.S. pension and post-retirement benefit obligations as of November 3, 2019. Each change of 25 basis points in the discount rate assumption would have had an estimated $40 million impact on the benefit obligations as of November 3, 2019. Each change of 25 basis points in the discount rate assumption or expected rate of return assumption would not have a material impact on annual net retirement benefit costs for fiscal year 2020.

Stock-based compensation expense. Stock-based compensation expense consists of expense for RSUs and stock options granted to employees and non-employees or assumed from acquisitions as well as expense associated with Broadcom employee stock purchase plan ("ESPP"). We recognize compensation expense for time-based stock options and ESPP rights based on the estimated grant-date fair value method required under the authoritative guidance using the Black-Scholes valuation model.

Certain equity awards include both time-based and market-based conditions and are accounted for as market-based awards. The fair value of these market-based awards is estimated on the date of grant using a Monte Carlo simulation model.

Employee Bonus Programs. Our employee bonus programs, which are overseen by our Compensation Committee, or our Board, in the case of our Chief Executive Officer, provide for variable compensation based on the attainment of overall corporate annual targets and functional performance metrics. In the first fiscal quarter of the year, if management determines that it is probable that the targets and metrics will be achieved and the amounts can be reasonably estimated, a variable, proportional compensation accrual is recognized based on an assumed 100% achievement of the targets and metrics. The bonus payout levels can be greater if attainment of metrics and targets is greater than 100% and a portion of the payouts may not occur if a minimum floor of performance is not achieved. In subsequent quarters, we monitor and accrue for variable compensation expense based on our actual progress toward the achievement of the annual targets and metrics. The actual achievement of target metrics at the end of the fiscal year, which is subject to approval by our Compensation Committee, may result in the actual variable compensation amounts being significantly higher or lower than the relevant estimated amounts accrued in earlier quarters, which would result in a corresponding adjustment in the fourth fiscal quarter.

Fiscal Year Presentation

We operate on a 52- or 53-week fiscal year ending on the Sunday closest to October 31 in a 52-week year and the first Sunday in November in a 53-week year. Our fiscal years 2019 and 2017 consisted of 52 weeks. Fiscal year 2018 consisted of 53 weeks.

The financial statements included in Part II, Item 8. of this Annual Report on Form 10-K are presented in accordance with GAAP and expressed in U.S. dollars.

Table of Contents

Results of Operations

Fiscal Year 2019 Compared to Fiscal Year 2018

The following table sets forth our results of operations for the periods presented:

	Fiscal Year Ended			
	November 3, 2019	November 4, 2018	November 3, 2019	November 4, 2018
	(In millions)		(As a percentage of net revenue)	
Statements of Operations Data:				
Net revenue:				
Products	$ 18,117	$ 19,754	80%	95%
Subscriptions and services	4,480	1,094	20	5
Total net revenue	22,597	20,848	100	100
Cost of revenue:				
Cost of products sold	6,208	6,924	28	33
Cost of subscriptions and services	515	97	2	1
Purchase accounting effect on inventory	—	70	—	—
Amortization of acquisition-related intangible assets	3,314	3,004	15	14
Restructuring charges	77	20	—	—
Total cost of revenue	10,114	10,115	45	48
Gross margin	12,483	10,733	55	52
Research and development	4,696	3,768	21	18
Selling, general and administrative	1,709	1,056	8	5
Amortization of acquisition-related intangible assets	1,898	541	8	3
Restructuring, impairment and disposal charges	736	219	3	1
Litigation settlements	—	14	—	—
Total operating expenses	9,039	5,598	40	27
Operating income	$ 3,444	$ 5,135	15%	25%

Net Revenue

Historically, a relatively small number of customers has accounted for a significant portion of our net revenue. Sales of products to distributors accounted for 46% and 34% of our net revenue for fiscal years 2019 and 2018, respectively. Direct sales to WT Microelectronics, a distributor, accounted for 17% of our net revenue for fiscal year 2019. No direct customer represented more than 10% of our net revenue during fiscal year 2018. We believe our aggregate sales to our top five end customers through all channels accounted for more than 30% and more than 40% of our net revenue for fiscal years 2019 and 2018, respectively. We believe aggregate sales to Apple Inc., through all channels, accounted for approximately 20% of our net revenue for fiscal year 2019 and approximately 25% for fiscal year 2018. We expect to continue to experience significant customer concentration in future periods. The loss of, or significant decrease in demand from, any of our top five end customers could have a material adverse effect on our business, results of operations and financial condition. Additionally, if export restrictions on one of our larger customers continue, revenue in future periods may continue to be adversely impacted.

From time to time, some of our key semiconductor customers place large orders or delay orders, causing our quarterly net revenue to fluctuate significantly. This is particularly true for our wireless products as fluctuations may be magnified by the launches of, and seasonal variations in sales of mobile handsets.

Although we recognize revenue for the majority of our products when title and control transfer in Penang, Malaysia, we disclose net revenue by country based on the geographic shipment or delivery location specified by distributors, OEMs, contract manufacturers, channel partners, or software customers. In fiscal year 2019, approximately 35% of our net revenue came from shipments or deliveries to China (including Hong Kong), compared to approximately 50% for both fiscal years 2018 and 2017. However, the end customers for either our products or for the end products into which our products are incorporated, are frequently located in countries other than China (including Hong Kong). As a result, we believe that a substantially smaller percentage of our net revenue is ultimately dependent on sales of either our product or our customers' product incorporating our product, to end customers located in China (including Hong Kong).

The following tables set forth net revenue by segment for the periods presented:

	Fiscal Year Ended			
Net Revenue by Segment	November 3, 2019	November 4, 2018	$ Change	% Change
	(In millions, except for percentages)			
Semiconductor solutions	$ 17,368	$ 18,934	$ (1,566)	(8)%
Infrastructure software	5,156	1,780	3,376	190 %
IP licensing	73	134	(61)	(46)%
Total net revenue	$ 22,597	$ 20,848	$ 1,749	8 %

	Fiscal Year Ended	
Net Revenue by Segment	November 3, 2019	November 4, 2018
	(As a percentage of net revenue)	
Semiconductor solutions	77%	91%
Infrastructure software	23	8
IP licensing	—	1
Total net revenue	100%	100%

Our total net revenue increased primarily due to the acquisition of CA in fiscal year 2019. Net revenue from our semiconductor solutions segment decreased due to lower demand for our wireless content in mobile handsets, as well as lower demand for our broadband, optocoupler, set-top box and server storage connectivity. Fiscal year 2018 semiconductor solutions revenue benefited from a later than typical new mobile handset ramp with a major customer in the first quarter, which resulted in higher shipments in that quarter, as well as an extra week in the fiscal year as compared to fiscal year 2019. Net revenue from our infrastructure software segment increased primarily due to contributions from our CA mainframe and enterprise software products.

Gross Margin

Gross margin was $12,483 million for fiscal year 2019 compared to $10,733 million for fiscal year 2018. Gross margin as a percentage of net revenue increased to 55% in fiscal year 2019 from 52% for fiscal year 2018. These increases were primarily due to contributions from our CA mainframe and enterprise software products and favorable product mix within our semiconductor solutions segment. These increases were partially offset by higher amortization of acquisition-related intangible assets and restructuring charges as a result of the CA Merger and higher stock-based compensation expense. We expect to incur additional amortization of acquisition-related intangible assets in future periods as a result of our acquisition of the Symantec Business and any further acquisitions we may make.

Research and Development Expense

Research and development expense increased $928 million, or 25%, in fiscal year 2019. Research and development expense as a percentage of net revenue was 21% and 18% for fiscal years 2019 and 2018, respectively. The increase was primarily due to the acquisition of CA and higher stock-based compensation expense, offset by lower variable employee compensation expense. Stock-based compensation expense increased primarily due to the issuance of multi-year equity grants of time- and market-based RSUs (the “Multi-Year Equity Awards”) in the first quarter of fiscal year 2019, the impact of the change from annual to quarterly vesting of equity awards and the assumed CA equity awards. Our stock-based compensation expense for fiscal year 2019 included employee equity awards granted at higher grant-date fair values than those granted in prior years, which also contributed to the increase. We expect to incur additional research and development expense in future periods as a result of our acquisition of the Symantec Business and any future acquisitions we may make.

Selling, General and Administrative Expense

Selling, general and administrative expense increased $653 million, or 62%, in fiscal year 2019. Selling, general and administrative expense as a percentage of net revenue was 8% and 5% for fiscal years 2019 and 2018, respectively. The increase was primarily due to the acquisition of CA and higher stock-based compensation expense. Stock-based compensation expense increased primarily due to the issuance of the Multi-Year Equity Awards, the impact of the change from annual to quarterly vesting of equity awards and the assumed CA equity awards.

Amortization of Acquisition-Related Intangible Assets

Amortization of acquisition-related intangible assets recognized in operating expenses increased $1,357 million, or 251%, in fiscal year 2019. The increase was primarily due to the addition of amortization of intangible assets acquired in the CA Merger. We expect to incur additional amortization of acquisition-related intangible assets in future periods as a result of our acquisition of the Symantec Business and any further acquisitions we may make.

Restructuring, Impairment and Disposal Charges

Restructuring, impairment and disposal charges included in operating expenses increased $517 million, or 236%, in fiscal year 2019. The increase was primarily due to employee termination costs, as well as lease and other exit costs resulting from the CA Merger. We expect to incur additional restructuring charges in future periods as a result of our acquisition of the Symantec Business and any further acquisitions we may make.

Segment Operating Results

	Fiscal Year Ended			
Operating Income (Loss)	**November 3, 2019**	**November 4, 2018**	**$ Change**	**% Change**
	(In millions, except for percentages)			
Semiconductor solutions	$ 8,150	$ 9,090	$ (940)	(10)%
Infrastructure software	3,781	1,250	2,531	202 %
IP licensing	(2)	70	(72)	(103)%
Unallocated expenses	(8,485)	(5,275)	(3,210)	61 %
Total operating income	$ 3,444	$ 5,135	$ (1,691)	(33)%

Operating income from our semiconductor solutions segment decreased primarily due to lower demand for our wireless content in mobile handsets, as well as lower demand for our optocoupler, broadband, server storage connectivity and set-top box products. Fiscal year 2018 semiconductor solutions operating income benefited from a later than typical new mobile handset ramp with a major customer in the first quarter, which resulted in higher shipments in that quarter, as well as an extra week in the fiscal year as compared to fiscal year 2019. Operating income from our infrastructure software segment increased primarily due to contributions from our CA mainframe and enterprise software products.

Unallocated expenses include amortization of acquisition-related intangible assets; stock-based compensation expense; acquisition-related costs; restructuring, impairment and disposal charges; and other costs that are not used in evaluating the results of, or in allocating resources to, our segments. Unallocated expenses increased 61% in fiscal year 2019 mainly due to higher amortization of acquisition-related intangible assets, stock-based compensation expense, and restructuring, impairment and disposal charges primarily related to the CA Merger. The increase in stock-based compensation expense also due to the issuance of the Multi-Year Equity Awards and the impact of the change from annual to quarterly vesting of certain time-based equity awards.

Non-Operating Income and Expenses

Interest expense. Interest expense was $1,444 million and $628 million for fiscal years 2019 and 2018, respectively. Interest expense was higher in fiscal year 2019 primarily due to interest on the debt we incurred to finance the CA Merger in the first quarter of fiscal year 2019. We expect to incur additional interest expense in future periods as a result of term loan indebtedness associated with any future acquisitions, including our acquisition of the Symantec Business.

Other income, net. Other income, net was $226 million and $144 million in fiscal years 2019 and 2018, respectively. The increase was primarily due to an increase in unrealized gains on investments partially offset by losses on foreign currency remeasurement.

Benefit from income taxes. Benefit from income taxes was $510 million and $8,084 million for fiscal years 2019 and 2018, respectively. The benefit from income taxes in fiscal year 2019 was primarily due to $232 million of excess benefit from stock-based awards that vested or were exercised during the year, $131 million from the recognition of gross unrecognized tax benefits as a result of audit settlements and lapses of statutes of limitations net of increases in balances related to tax positions taken during the current year, $80 million of benefit from deferred tax measurement in state and foreign jurisdictions, $66 million of benefit related to internal reorganizations, and $54 million of benefit from the partial release of our valuation allowance as a result of the CA Merger, partially offset by $113 million of expense from a change in estimate of our fiscal year 2018 benefit as a result of proposed U.S. Treasury regulations issued in fiscal year 2019 related to the 2017 Tax Reform Act. The benefit from income taxes in fiscal year 2018 was primarily due to income tax benefits recognized from the enactment of the 2017 Tax Reform Act and the Redomiciliation Transaction.

Fiscal Year 2018 Compared to Fiscal Year 2017

The following tables set forth our results of operations for the periods presented:

Statements of Operations Data:	**Fiscal Year Ended**			
	November 4, 2018	**October 29, 2017**	**November 4, 2018**	**October 29, 2017**
	(In millions)		**(As a percentage of net revenue)**	
Net revenue:				
Products	$ 19,754	$ 17,033	95%	97%
Subscriptions and services	1,094	603	5	3
Total net revenue	20,848	17,636	100	100
Cost of revenue:				
Cost of products sold	6,924	6,549	33	37
Cost of subscriptions and services	97	44	1	1
Purchase accounting effect on inventory	70	4	—	—
Amortization of acquisition-related intangible assets	3,004	2,511	14	14
Restructuring charges	20	19	—	—
Total cost of revenue	10,115	9,127	48	52
Gross margin	10,733	8,509	52	48
Research and development	3,768	3,302	18	19
Selling, general and administrative	1,056	789	5	4
Amortization of acquisition-related intangible assets	541	1,764	3	10
Restructuring, impairment and disposal charges	219	161	1	1
Litigation settlements	14	122	—	1
Total operating expenses	5,598	6,138	27	35
Operating income	$ 5,135	$ 2,371	25%	13%

The following table sets forth net revenue by segment for the periods presented:

Net Revenue

Net Revenue by Segment	**Fiscal Year Ended November 4, 2018**	**Fiscal Year Ended October 29, 2017**	**$ Change**	**% Change**
	(In millions, except for percentages)			
Semiconductor solutions	$ 18,934	$ 17,491	$ 1,443	8 %
Infrastructure software	1,780	—	1,780	—
IP licensing	134	145	(11)	(8)%
Total net revenue	$ 20,848	$ 17,636	$ 3,212	18 %

Net Revenue by Segment	Fiscal Year Ended November 4, 2018	Fiscal Year Ended October 29, 2017
	(As a percentage of net revenue)	
Semiconductor solutions	91%	99%
Infrastructure software	8	—
IP licensing	1	1
Total net revenue	100%	100%

Our total net revenue increased primarily due to the acquisition of Brocade in fiscal year 2018, as well as strong organic year-over-year growth.

Net revenue from our semiconductor solutions segment increased due to an increase in our wireless content in handsets and a later than typical new handset ramp with a major customer, which resulted in product shipments that typically would have occurred in the fourth quarter of fiscal year 2017 occurring in the first quarter of fiscal year 2018. Additionally, net revenue from our semiconductor solutions segment increased due to an increase in demand for our networking application-specific integrated circuit ("ASIC") products. These increases were partially offset by a decrease in demand for our set top box and optical products. Net revenue from our infrastructure software segment increased due to contributions from our FC SAN business.

Gross Margin

Gross margin was $10,733 million for fiscal year 2018 compared to $8,509 million for fiscal year 2017. Gross margin as a percentage of net revenue increased to 52% in fiscal year 2018 from 48% for fiscal year 2017. The fiscal year 2018 increases were primarily due to the addition of Brocade products, as well as a more favorable product mix, partially offset by an increase in amortization of acquisition-related intangible assets.

Research and Development Expense

Research and development expense increased $466 million, or 14%, in fiscal year 2018. Research and development expense remained relatively flat as a percentage of net revenue at 18% and 19% for fiscal years 2018 and 2017, respectively. The increase in research and development expense dollars for fiscal year 2018 was primarily due to the acquisition of Brocade, higher stock-based compensation expense, and higher variable employee compensation expense due to fiscal year 2018 operating performance. Stock-based compensation expense was higher in fiscal year 2018 primarily due to annual employee equity awards granted at higher grant-date fair values.

Selling, General and Administrative Expense

Selling, general and administrative expense increased $267 million, or 34%, in fiscal year 2018. Selling, general and administrative expense as a percentage of net revenue remained relatively flat at 5% and 4% for fiscal years 2018 and 2017, respectively. The increase in selling, general and administrative expense dollars for fiscal year 2018 was primarily due to the acquisition of Brocade and associated acquisition-related costs, as well as higher stock-based compensation expense. Stock-based compensation expense was higher in fiscal year 2018 primarily due to annual employee equity awards granted at higher grant-date fair values.

Amortization of Acquisition-Related Intangible Assets

Amortization of acquisition-related intangible assets recognized in operating expenses decreased $1,223 million, or 69%, in fiscal year 2018. The decrease was primarily due to the full amortization of certain intangible assets acquired as part of our acquisition of Broadcom Corporation, partially offset by the addition of amortization of intangible assets acquired in the Brocade Merger.

Restructuring, Impairment and Disposal Charges

Restructuring, impairment and disposal charges included in operating expenses increased $58 million, or 36%, in fiscal year 2018. The increase was primarily due to an increase in restructuring activities resulting from the Brocade Merger, partially offset by a decrease in restructuring activities resulting from our acquisition of Broadcom Corporation.

Litigation Settlements

During fiscal years 2018 and 2017, we incurred $14 million and $122 million of litigation charges, respectively, associated with certain legal settlement agreements.

Segment Operating Results

Operating Income by Segment	Fiscal Year Ended November 4, 2018	Fiscal Year Ended October 29, 2017	$ Change	% Change
	(In millions, except for percentages)			
Semiconductor solutions	$ 9,090	$ 7,900	$ 1,190	15 %
Infrastructure software	1,250	—	1,250	—
IP licensing	70	70	—	—
Unallocated expenses	(5,275)	(5,599)	324	(6)%
Total operating income	$ 5,135	$ 2,371	$ 2,764	117 %

Operating income from our semiconductor solutions segment increased due to an increase in our wireless content in handsets, as well as a later than typical new handset ramp with a major customer, which resulted in higher shipments in fiscal year 2018. Additionally, we experienced an increase in demand for our networking ASIC products. These increases were partially offset by a decrease in demand for our set-top box and optical products. Operating income from our infrastructure software segment increased primarily due to contributions from our FC SAN business.

Unallocated expenses include amortization of acquisition-related intangible assets, stock-based compensation expense, restructuring, impairment and disposal charges, acquisition-related costs, charges for litigation settlements, and other costs that are not used in evaluating the results of, or in allocating resources to, our segments. Unallocated expenses decreased 6% in fiscal year 2018 primarily due to decreases in amortization of acquisition-related intangible assets and charges for litigation settlements, substantially offset by increases in stock-based compensation expense, acquisition-related costs, purchase accounting effect on inventory, and restructuring, impairment and disposal charges.

Non-Operating Income and Expenses

Interest expense. Interest expense was $628 million and $454 million for fiscal years 2018 and 2017, respectively. Interest expense was higher in fiscal year 2018 primarily due to the October 2017 issuance of unsecured senior notes, as well as debt commitment fees paid in connection with the Brocade Merger.

Impairment on investment. We recognized $106 million in fiscal year 2018 for an other than temporary impairment of one of our cost method investments.

Loss on extinguishment of debt. Loss on extinguishment of debt was $166 million for fiscal year 2017. We issued senior unsecured notes in January 2017 to repay all of the term loans outstanding under our guaranteed, collateralized credit agreement dated February 1, 2016. As a result, we wrote-off $166 million of debt issuance costs.

Other income, net. Other income, net was $144 million and $74 million in fiscal years 2018 and 2017, respectively. The increase was primarily due to increases in interest income and gains on foreign currency remeasurement.

Provision for (benefit from) income taxes. Our benefit from income taxes was $8,084 million for fiscal year 2018, compared to a provision for income taxes of $35 million for fiscal year 2017. The benefit from income taxes in fiscal year 2018 was primarily due to the income tax benefits recognized from the enactment of the 2017 Tax Reform Act and the Redomiciliation Transaction. The provision for income taxes in fiscal year 2017 was primarily due to an increase in profit before tax and a discrete expense of $76 million resulting from entity reorganizations, partially offset by the recognition of $273 million of excess tax benefits from stock-based equity awards that vested or were exercised during fiscal year 2017 and, to a lesser extent, the recognition of previously unrecognized tax benefits primarily as a result of audit settlements.

Liquidity and Capital Resources

The following section discusses our principal liquidity and capital resources as well as our primary liquidity requirements and uses of cash. Our cash and cash equivalents are maintained in highly liquid investments with remaining maturities of 90 days or less at the time of purchase. We believe our cash equivalents are liquid and accessible.

Our primary sources of liquidity as of November 3, 2019 consisted of: (i) $5,055 million in cash and cash equivalents, (ii) cash we expect to generate from operations, (iii) available capacity under our $5 billion revolving credit facility (the “Revolving Facility”), and (iv) available capacity under our $2 billion commercial paper program. In addition, we may also generate cash from the sale of assets and debt or equity financing from time to time.

Our short-term and long-term liquidity requirements primarily arise from: (i) business acquisitions and investments we may make from time to time, (ii) working capital requirements, (iii) research and development and capital expenditure needs, (iv) cash dividend payments (if and when declared by the Board of Directors), (v) interest and principal payments related to outstanding indebtedness and (vi) payment of income taxes. Beginning April 2018, we settle withholding tax amounts due upon vesting of compensatory equity awards using cash on hand, and withholding from the grant recipient that number of shares having a value equivalent to the withholding tax amount ("Tax Shares"). This net settlement method reduces the dilutive effects of such awards as they vest. Previously, the Tax Shares were issued and mandatorily sold into the market, and the cash proceeds were used to pay such withholding tax amounts. This change results in an increased use of our cash as our outstanding equity awards vest. Our ability to fund these requirements will depend, in part, on our future cash flows, which are determined by our future operating performance and, therefore, subject to prevailing global macroeconomic conditions and financial, business and other factors, some of which are beyond our control.

Our capital expenditures for fiscal year 2019 were lower than fiscal year 2018, due primarily to the completion of construction at our Irvine and San Jose campuses. We expect capital expenditures to be higher in fiscal year 2020 as compared to fiscal year 2019 due to the Symantec Asset Purchase on November 4, 2019.

Our debt and liquidity needs increased as a result of completing the Symantec Asset Purchase. We funded $10.7 billion of cash consideration needed for that transaction with debt financing.

We believe that our cash and cash equivalents on hand, cash flows from operations, and the Revolving Facility will provide sufficient liquidity to operate our business and fund our current and assumed obligations for at least the next 12 months.

From time to time, we engage in discussions with third parties regarding potential acquisitions of, or investments in, businesses, technologies and product lines. Any such transaction, or evaluation of potential transactions, could require significant use of our cash and cash equivalents, or require us to increase our borrowings to fund such transactions. If we do not have sufficient cash to fund our operations or finance growth opportunities, including acquisitions, or unanticipated capital expenditures, our business and financial condition could suffer. In such circumstances, we may seek to obtain new debt or equity financing. However, we cannot assure you that such additional financing will be available on terms acceptable to us or at all. Our ability to service our senior unsecured notes and outstanding term loans (including those we borrowed to fund our acquisition of the Symantec Business) and any other indebtedness we may incur will depend on our ability to generate cash in the future. We may also elect to sell additional debt or equity securities for reasons other than those specified above.

Working Capital

Working capital decreased to $3,018 million at November 3, 2019 from $6,769 million at November 4, 2018. The decrease was attributable to the following:

- Accounts receivable decreased to $3,259 million at November 3, 2019 from $3,325 million at November 4, 2018, primarily due to a higher volume of trade accounts receivable factoring, partially offset by higher revenue.
- Inventory decreased to $874 million at November 3, 2019 from $1,124 million at November 4, 2018 primarily due to our continued focus on inventory management.
- Current portion of long-term debt increased $2,787 million primarily due to certain unsecured senior notes becoming due within the next twelve months.
- Other current liabilities increased to $2,616 million at November 3, 2019 from $812 million at November 4, 2018 primarily due to the CA Merger and increases in contract liabilities from adoption of Accounting Standard Codification Topic 606 ("Topic 606"), notional pooling liabilities, restructuring reserves, taxes payable and interest payable.

These decreases in working capital were offset in part by the following:

- Cash and cash equivalents increased to $5,055 million at November 3, 2019 from $4,292 million at November 4, 2018 primarily due to $30,034 million in proceeds from borrowings, $9,697 million in net cash provided by operating activities, $3,679 million of Mandatory Convertible Preferred Stock issuance proceeds and $957 million in proceeds from sale of Veracode, partially offset by $16,800 million of debt repayments, $16,027 million paid for the CA Merger, $5,435 million of common stock repurchases, $4,235 million of dividend payments, and $972 million in payments of employee withholding taxes related to net share settled equity awards. See the "Cash Flows" section below for further details.
- Other current assets increased to $729 million at November 3, 2019 from $366 million at November 4, 2018 primarily due to assets acquired in the CA Merger and increases in contract assets from adoption of Topic 606 and prepaid taxes.

Working capital decreased to $6,769 million at November 4, 2018 from $13,294 million at October 29, 2017. The decrease was attributable to the following:

- Cash and cash equivalents decreased to $4,292 million at November 4, 2018 from $11,204 million at October 29, 2017 largely due to $7,258 million of common stock repurchases, $4,780 million paid for the Brocade Merger and $2,998 million of dividend and distribution payments, partially offset by $8,880 million in net cash provided by operating activities. See the “Cash Flows” section below for further details.
- Inventory decreased to $1,124 million at November 4, 2018 from $1,447 million at October 29, 2017, due to the timing of a major customer's new handset ramp and our continued focus on inventory management.
- Other current assets decreased to $366 million at November 4, 2018 from $724 million at October 29, 2017, primarily due to lower prepaid expenses, lower prepaid taxes as a result of the 2017 Tax Reform Act, and collection of other receivables.
- Other current liabilities increased to $812 million at November 4, 2018 from $681 million at October 29, 2017, primarily due to higher deferred revenue associated with the Brocade Merger.

These decreases in working capital were offset in part by the following:

- Accounts receivable increased to $3,325 million at November 4, 2018 from $2,448 million at October 29, 2017, primarily due to higher volume and revenue linearity.
- Accounts payable decreased to $811 million at November 4, 2018 from $1,105 million at October 29, 2017, primarily due to timing of vendor payments.
- Current portion of long-term debt decreased $117 million due to repayment of certain unsecured senior notes assumed in the acquisition of Broadcom Corporation.

Capital Returns

During fiscal year 2019, we repurchased and retired approximately 21 million shares of our common stock at a weighted average price of $258.52 under an $18 billion stock repurchase program previously authorized by our Board of Directors. During fiscal year 2018, we repurchased and retired approximately 32 million shares of our common stock at a weighted average price of $227.60 under this stock repurchase program. This authorization ended on November 3, 2019.

	Fiscal Year Ended		
	November 3, 2019	November 4, 2018	October 29, 2017
	(In millions, except per share data)		
Cash dividends and distributions declared and paid per share/unit	$ 10.60	$ 7.00	$ 4.08
Cash dividends and distributions declared and paid	$ 4,235	$ 2,998	$ 1,745
Stock repurchases	$ 5,435	$ 7,258	$ —

In addition, during fiscal years 2019 and 2018, we paid approximately $972 million and $56 million, respectively, in employee withholding taxes due upon the vesting of, and related to net settled equity awards. We withheld approximately 4 million and 0.2 million shares of common stock from employees in fiscal years 2019 and 2018, respectively, in connection with such net share settlements.

Cash Flows

	Fiscal Year Ended		
	November 3, 2019	November 4, 2018	October 29, 2017
	(In millions)		
Net cash provided by operating activities	$ 9,697	$ 8,880	$ 6,551
Net cash used in investing activities	(15,422)	(4,674)	(674)
Net cash provided by (used in) financing activities	6,488	(11,118)	2,230
Net change in cash and cash equivalents	$ 763	$ (6,912)	$ 8,107

Operating Activities

Cash provided by operating activities consisted of net income adjusted for certain non-cash items and changes in assets and liabilities. The $817 million increase in cash provided by operations during fiscal year 2019 compared to fiscal year 2018 was primarily due to the adjustments to net income for non-cash items and increases in working capital, partially offset by the decrease in net income. Non-cash adjustments to net income for fiscal year 2019 as compared to fiscal year 2018 primarily included a decrease in benefits from deferred taxes and other non-cash taxes and increases in amortization of intangible assets, stock-based compensation, and non-cash restructuring, impairment and disposal charges, partially offset by a decrease in impairment of investment.

The $2,329 million increase in cash provided by operations during fiscal year 2018 compared to fiscal year 2017 was due to the impact of net income, partially offset by adjustments to net income for non-cash items. Net income for fiscal year 2018 reflected an income tax benefit of $8,084 million principally resulting from the enactment of the 2017 Tax Reform Act and the impact from the Redomiciliation Transaction and related internal reorganizations. This benefit was primarily non-cash, resulting in a significant adjustment to net income, and was included in the deferred taxes and other non-cash taxes line in the consolidated statement of cash flows for fiscal year 2018. Other non-cash adjustments to net income for fiscal year 2018 as compared to fiscal year 2017 primarily included decreases in amortization of intangible assets and the non-cash portion of the debt extinguishment loss, partially offset by increases in stock-based compensation and impairment of investment.

Investing Activities

Cash used in investing activities primarily consisted of cash used for acquisitions, capital expenditures and investments, partially offset by proceeds from sales of businesses and assets. The $10,748 million increase in cash used in investing activities for fiscal year 2019 compared to fiscal year 2018 was primarily related to $16,027 million paid for the CA Merger in fiscal year 2019, partially offset by proceeds from sales of businesses as well as lower capital expenditures.

The $4,000 million increase in cash used in investing activities for fiscal year 2018 compared to fiscal year 2017 was primarily related to $4,780 million paid for the Brocade Merger in fiscal year 2018, partially offset by proceeds from sales of businesses as well as lower capital expenditures.

Financing Activities

Cash provided by (used in) financing activities primarily consisted of net proceeds and payments related to our long-term debt, dividend and distribution payments, stock repurchases, and the issuances of common stock pursuant to our employee equity incentive plans. The $17,606 million increase in cash related to financing activities for fiscal year 2019 compared to fiscal year 2018 was primarily due to a $14,207 million increase in net proceeds from borrowings, net proceeds of $3,679 million from issuance of preferred stock, and a $1,823 million decrease in common stock repurchases, partially offset by a $1,237 million increase in dividend and distribution payments and a $916 million increase in employee withholding taxes related to net share settled equity awards.

The $13,348 million increase in cash used in financing activities for fiscal year 2018 compared to fiscal year 2017 was primarily due to $7,258 million of stock repurchases, an increase in dividend and distribution payments and the repayment of debt.

Indebtedness

See Note 9. "Borrowings" included in Part II, Item 8. of this Annual Report on Form 10-K.

Contractual Commitments

			Payments Due by Period		
	Total	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
			(In millions)		
Debt principal, interest and fees	$ 39,038	$ 5,628	$ 10,163	$ 8,021	$ 15,226
Purchase commitments	716	652	64	—	—
Other contractual commitments	197	133	50	14	—
Operating lease obligations	800	115	179	116	390
Total	$ 40,751	$ 6,528	$ 10,456	$ 8,151	$ 15,616

Debt Principal, Interest and Fees. Represents principal, estimated interest and fees on borrowings. For borrowings subject to a floating interest rate, the estimated interest was based on the rate in effect during the last month of the fiscal year ended November 3, 2019.

Purchase Commitments. Represents unconditional purchase obligations that include agreements to purchase goods or services, primarily inventory, that are enforceable and legally binding on us and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions, and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty. Cancellation for outstanding purchase orders for capital expenditures in connection with the internal fabrication facility expansion and construction of our new campuses is generally allowed but requires payment of all costs incurred through the date of cancellation and, therefore, cancelable purchase orders for these capital expenditures are included in the table above.

Other Contractual Commitments. Represents amounts payable pursuant to agreements related to information technology, human resources, financial infrastructure outsourcing services and other service agreements.

Operating Lease Obligations. Represents real property and equipment leased from third parties under non-cancelable operating leases.

Due to the inherent uncertainty with respect to the timing of future cash outflows associated with our unrecognized tax benefits at November 3, 2019, we are unable to reliably estimate the timing of cash settlement with the respective taxing authority. Therefore, $3,269 million of unrecognized tax benefits and accrued interest classified within other long-term liabilities on our consolidated balance sheet as of November 3, 2019 have been excluded from the contractual obligations table above.

Off-Balance Sheet Arrangements

We had no material off-balance sheet arrangements at November 3, 2019 as defined in Item 303(a)(4)(ii) of Regulation S-K under the Exchange Act.

Indemnifications

See Note 13. "Commitments and Contingencies" in Part II, Item 8 of this Form 10-K.

Accounting Changes and Recent Accounting Standards

For a description of accounting changes and recent accounting standards, including the expected dates of adoption and estimated effects, if any, in our consolidated financial statements, see Note 2. "Summary of Significant Accounting Policies" included in Part II, Item 8. of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Derivative Instruments

From time to time, we use foreign exchange forward contracts to hedge a portion of our exposures to changes in currency exchange rates, which result from our global operating and financing activities. Gains and losses from foreign currency transactions, as well as derivative instruments, were not significant for any period presented in the consolidated financial statements included in this Form 10-K. As of November 3, 2019, we did not have any outstanding foreign exchange forward contracts.

European Debt Exposures

We actively monitor our exposure to the European financial markets, including the impact of sovereign debt issues. We also seek to mitigate our risk by investing in fixed deposits with various financial institutions and we limit the amount we hold with any one institution. We do not have any direct investments in the sovereign debt of European countries. From time to time, we may have deposits with major European financial institutions. We also seek to mitigate collection risks from our customers by performing regular credit evaluations of our customers' financial condition. As of November 3, 2019, we do not believe that we have any material direct or indirect exposure to the European financial markets.

Interest Rate Risk

At November 3, 2019, we had $1,600 million of outstanding term loans, which are subject to floating interest rates. A 1% change in the interest rate would affect interest expense on our term loans by approximately $16 million over the next 12 months.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

BROADCOM INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Broadcom Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Broadcom Inc. and its subsidiaries (the "Company") as of November 3, 2019 and November 4, 2018, and the related consolidated statements of operations, of comprehensive income, of equity and of cash flows for each of the three years in the period ended November 3, 2019, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of November 3, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of November 3, 2019 and November 4, 2018, and the results of its operations and its cash flows for each of the three years in the period ended November 3, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of November 3, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control Over Financial Reporting, management has excluded CA, Inc. from its assessment of internal control over financial reporting as of November 3, 2019, because it was acquired by the Company in a purchase business combination during 2019. We have also excluded CA, Inc. from our audit of internal control over financial reporting. CA, Inc. is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent 3% and 15%, respectively, of the related consolidated financial statement amounts as of and for the year ended November 3, 2019.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and

dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Valuation of Developed Technology and Customer Contracts and Related Relationships Intangible Assets Acquired in the CA, Inc. Acquisition

As described in Notes 2 and 4 to the consolidated financial statements, the Company completed the acquisition of CA, Inc. during fiscal 2019 for net consideration of $16,094 million, of which $4,957 million of finite-lived developed technology and $4,190 million of finite-lived customer contracts and related relationships intangible assets were recorded. Management valued the developed technology using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the developed technology less charges representing the contribution of other assets to those cash flows. Management valued the customer contracts and related relationships using the with-and-without-method under the income approach. In this method, the fair value was measured by the difference between the present values of the cash flows with and without the existing customers in place over the period of time necessary to reacquire the customers. As disclosed by management, significant estimates and assumptions in estimating the fair value of the developed technology and the customer contracts and related relationships include future expected cash flows from product sales, customer contracts and acquired technologies, revenue growth rate, customer ramp up period, technology obsolescence rates, and discount rates.

The principal considerations for our determination that performing procedures relating to the valuation of the developed technology and customer contracts and relationships intangible assets acquired in the CA, Inc. acquisition is a critical audit matter are (i) there was a high degree of auditor judgment and subjectivity in applying our procedures relating to the fair value measurement of the developed technology and the customer contracts and related relationships due to the significant judgment by management when developing these estimates, (ii) significant audit effort was required in assessing the significant assumptions relating to the valuation of the developed technology and the customer contracts and related relationships, which include the revenue growth rate, the technology obsolescence rates, the customer ramp-up period, and the discount rates, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the acquisition accounting, including controls over management's valuation of the developed technology and the customer contracts and related relationships and controls over development of the assumptions related to the valuation of the developed technology and the customer contracts and related relationships including the revenue growth rate, the technology obsolescence rates, the customer ramp-up period, and the discount rates. These procedures also included, among others, reading the purchase agreement and testing management's process for determining the fair value of these intangible assets, including evaluating the appropriateness of the valuation methods, testing the completeness and accuracy of underlying data, and evaluating the reasonableness of the significant assumptions, which include the revenue growth rate, the technology obsolescence rates, the customer ramp-up period, and the discount rates. Evaluating the reasonableness of the revenue growth rate, the technology obsolescence rates, and the customer ramp-up period involved considering the past performance of the acquiree, benchmarking of peer companies and, for the revenue growth rate, industry data. Professionals with specialized skill and knowledge were used to assist us in evaluating the appropriateness of valuation methods and the reasonableness of the discount rates and the technology obsolescence rates.

Uncertain Tax Positions ("UTPs")

As described in Notes 2 and 11 to the consolidated financial statements, the gross unrecognized tax benefits balance was $4,422 million as of November 3, 2019. As management has disclosed, management evaluates the exposure associated with various tax filing positions and accrues an income tax liability when such positions do not meet the more-likely-than-not threshold for recognition. A tax benefit from an UTP may be recognized when it is more likely than not that the position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits.

The principal considerations for our determination that performing procedures relating to the UTPs is a critical audit matter are (i) there was significant judgment by management when evaluating the technical merits of these tax positions, (ii) significant auditor judgment, subjectivity, and effort was required in understanding the relevant information and evaluating the technical merits of the tax positions, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the identification and recognition of the income tax liability for UTPs, including controls addressing completeness of the UTPs as well as controls over the measurement of the income tax liability. These procedures also included, among others, (i) testing management's process for identifying potential new UTPs and evaluating possible outcomes for each UTP selected for testing, and (ii) testing the calculation of the liability for UTPs by jurisdiction, including management's assessment of the technical merits of tax positions and estimates of the amount of tax benefit expected to be sustained for each UTP selected for testing. Professionals with specialized skill and knowledge were used to assist in the evaluation of the completeness and measurement of the Company's UTPs, including the reasonableness of management's assessment of whether certain tax positions are more-likely-than-not of being sustained and the amount of potential benefit to be realized, and the application of relevant tax laws.

/s/ PricewaterhouseCoopers LLP

San Jose, California
December 20, 2019

We have served as the Company's auditor since 2006.

BROADCOM INC.

CONSOLIDATED BALANCE SHEETS

	November 3, 2019	November 4, 2018
	(In millions, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,055	$ 4,292
Trade accounts receivable, net	3,259	3,325
Inventory	874	1,124
Other current assets	729	366
Total current assets	9,917	9,107
Long-term assets:		
Property, plant and equipment, net	2,565	2,635
Goodwill	36,714	26,913
Intangible assets, net	17,554	10,762
Other long-term assets	743	707
Total assets	$ 67,493	$ 50,124
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 855	$ 811
Employee compensation and benefits	641	715
Current portion of long-term debt	2,787	—
Other current liabilities	2,616	812
Total current liabilities	6,899	2,338
Long-term liabilities:		
Long-term debt	30,011	17,493
Other long-term liabilities	5,613	3,636
Total liabilities	42,523	23,467
Commitments and contingencies (Note 13)		
Preferred stock dividend obligation	29	—
Stockholders' equity:		
Preferred stock, $0.001 par value; 100 shares authorized; 8.00% Mandatory Convertible Preferred Stock, Series A, 4 and 0 shares issued and outstanding; aggregate liquidation value of $3,738 and $0 as of November 3, 2019 and November 4, 2018, respectively	—	—
Common stock, $0.001 par value; 2,900 shares authorized; 398 and 408 shares issued and outstanding as of November 3, 2019 and November 4, 2018, respectively	—	—
Additional paid-in capital	25,081	23,285
Retained earnings	—	3,487
Accumulated other comprehensive loss	(140)	(115)
Total stockholders' equity	24,941	26,657
Total liabilities and equity	$ 67,493	$ 50,124

The accompanying notes are an integral part of these consolidated financial statements.

BROADCOM INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Fiscal Year Ended		
	November 3, 2019	November 4, 2018	October 29, 2017
	(In millions, except per share data)		
Net revenue:			
Products	$ 18,117	$ 19,754	$ 17,033
Subscriptions and services	4,480	1,094	603
Total net revenue	22,597	20,848	17,636
Cost of revenue:			
Cost of products sold	6,208	6,924	6,549
Cost of subscriptions and services	515	97	44
Purchase accounting effect on inventory	—	70	4
Amortization of acquisition-related intangible assets	3,314	3,004	2,511
Restructuring charges	77	20	19
Total cost of revenue	10,114	10,115	9,127
Gross margin	12,483	10,733	8,509
Research and development	4,696	3,768	3,302
Selling, general and administrative	1,709	1,056	789
Amortization of acquisition-related intangible assets	1,898	541	1,764
Restructuring, impairment and disposal charges	736	219	161
Litigation settlements	—	14	122
Total operating expenses	9,039	5,598	6,138
Operating income	3,444	5,135	2,371
Interest expense	(1,444)	(628)	(454)
Impairment on investment	—	(106)	—
Loss on extinguishment of debt	—	—	(166)
Other income, net	226	144	74
Income from continuing operations before income taxes	2,226	4,545	1,825
Provision for (benefit from) income taxes	(510)	(8,084)	35
Income from continuing operations	2,736	12,629	1,790
Loss from discontinued operations, net of income taxes	(12)	(19)	(6)
Net income	2,724	12,610	1,784
Dividends on preferred stock	29	—	—
Net income attributable to noncontrolling interest	—	351	92
Net income attributable to common stock	$ 2,695	$ 12,259	$ 1,692
Basic income per share attributable to common stock:			
Income per share from continuing operations	$ 6.80	$ 29.37	$ 4.19
Loss per share from discontinued operations	(0.03)	(0.04)	(0.01)
Net income per share	$ 6.77	$ 29.33	$ 4.18
Diluted income per share attributable to common stock:			
Income per share from continuing operations	$ 6.46	$ 28.48	$ 4.03
Loss per share from discontinued operations	(0.03)	(0.04)	(0.01)
Net income per share	$ 6.43	$ 28.44	$ 4.02
Weighted-average shares used in per share calculations:			
Basic	398	418	405
Diluted	419	431	421

The accompanying notes are an integral part of these consolidated financial statements.

BROADCOM INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Fiscal Year Ended		
	November 3, 2019	November 4, 2018	October 29, 2017
	(In millions)		
Net income	$ 2,724	$ 12,610	$ 1,784
Other comprehensive income (loss), net of tax:			
Change in actuarial loss and prior service costs associated with defined benefit pension plans and post-retirement benefit plans	(24)	(8)	43
Other comprehensive income (loss)	(24)	(8)	43
Comprehensive income	2,700	12,602	1,827
Comprehensive income attributable to noncontrolling interest	—	351	92
Comprehensive income attributable to Broadcom Inc. stockholders	$ 2,700	$ 12,251	$ 1,735

The accompanying notes are an integral part of these consolidated financial statements.

BROADCOM INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Year Ended		
	November 3, 2019	November 4, 2018	October 29, 2017
		(In millions)	
Cash flows from operating activities:			
Net income	$ 2,724	$ 12,610	$ 1,784
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of intangible assets	5,239	3,566	4,286
Depreciation	569	515	451
Stock-based compensation	2,185	1,227	921
Deferred taxes and other non-cash taxes	(934)	(8,270)	(173)
Impairment on investment	—	106	—
Non-cash portion of debt extinguishment loss	—	—	166
Non-cash restructuring, impairment and disposal charges	133	21	71
Non-cash interest expense	90	24	24
Other	(125)	37	7
Changes in assets and liabilities, net of acquisitions and disposals:			
Trade accounts receivable, net	486	(652)	(267)
Inventory	250	417	(39)
Accounts payable	(42)	(325)	(97)
Employee compensation and benefits	(294)	6	109
Contributions to defined benefit pension plans	—	(130)	(361)
Other current assets and current liabilities	(283)	369	(490)
Other long-term assets and long-term liabilities	(301)	(641)	159
Net cash provided by operating activities	9,697	8,880	6,551
Cash flows from investing activities:			
Acquisitions of businesses, net of cash acquired	(16,033)	(4,800)	(40)
Proceeds from sales of businesses	957	773	10
Purchases of property, plant and equipment	(432)	(635)	(1,069)
Proceeds from disposals of property, plant and equipment	88	239	441
Purchases of investments	(5)	(249)	(207)
Proceeds from sales and maturities of investments	5	54	200
Other	(2)	(56)	(9)
Net cash used in investing activities	(15,422)	(4,674)	(674)
Cash flows from financing activities:			
Proceeds from long-term borrowings	28,793	—	17,426
Repayment of debt	(16,800)	(973)	(13,668)
Other borrowings	1,241	—	—
Dividend and distribution payments on common stock and exchangeable limited partnership units	(4,235)	(2,998)	(1,745)
Repurchases of common stock - repurchase program	(5,435)	(7,258)	—
Shares repurchased for tax withholdings on vesting of equity awards	(972)	(56)	—
Issuance of preferred stock, net	3,679	—	—
Issuance of common stock	253	212	257
Other	(36)	(45)	(40)
Net cash provided by (used in) financing activities	6,488	(11,118)	2,230
Net change in cash and cash equivalents	763	(6,912)	8,107
Cash and cash equivalents at beginning of period	4,292	11,204	3,097
Cash and cash equivalents at end of period	$ 5,055	$ 4,292	$ 11,204
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 1,287	$ 547	$ 310
Cash paid for income taxes	$ 741	$ 512	$ 349

The accompanying notes are an integral part of these consolidated financial statements.

BROADCOM INC.

CONSOLIDATED STATEMENTS OF EQUITY

	Special Preference Preferred Stock		8.00% Mandatory Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Retained Earnings/(Accumulated Deficit)	Accumulated Other Comprehensive Loss	Total Broadcom Inc. Stockholders' Equity	Noncontrolling Interest	Total Equity
	Shares	Amount	Shares	Par Value	Shares	Par Value						
								(In millions)				
Balance as of October 30, 2016	23	$ —	—	$ —	398	$ —	$19,241	$ (215)	$ (134)	$ 18,892	$ 2,984	$21,876
Net income	—	—	—	—	—	—	—	1,692	—	1,692	92	1,784
Other comprehensive income	—	—	—	—	—	—	—	—	43	43	—	43
Cumulative effect of accounting change	—	—	—	—	—	—	—	47	—	47	3	50
Dividends to common stockholders	—	—	—	—	—	—	—	(1,653)	—	(1,653)	—	(1,653)
Distribution by Broadcom Cayman L.P. on exchangeable limited partnership units	—	—	—	—	—	—	—	—	—	—	(92)	(92)
Exchange of exchangeable limited partnership units for common stock and cancellation of preferred stock	(1)	—	—	—	1	—	86	—	—	86	(86)	—
Common stock issued	—	—	—	—	10	—	257	—	—	257	—	257
Stock-based compensation	—	—	—	—	—	—	921	—	—	921	—	921
Balance as of October 29, 2017	22	—	—	—	409	—	20,505	(129)	(91)	20,285	2,901	23,186
Net income	—	—	—	—	—	—	—	12,259	—	12,259	351	12,610
Other comprehensive loss	—	—	—	—	—	—	—	—	(8)	(8)	—	(8)
Cumulative effect of accounting change	—	—	—	—	—	—	—	(237)	(16)	(253)	(13)	(266)
Fair value of partially vested equity awards assumed in connection with the acquisition of Brocade Communications Systems, Inc.	—	—	—	—	—	—	8	—	—	8	—	8
Dividends to common stockholders	—	—	—	—	—	—	—	(2,921)	—	(2,921)	—	(2,921)

Distribution by Broadcom Cayman L.P. on exchangeable limited partnership units	—	—	—	—	—	—	—	—	—	—	(77)	(77)
Exchange of exchangeable limited partnership units for common stock and redemption of preferred stock due to the Redomiciliation Transaction	(22)	—	—	—	22	—	3,162	—	—	3,162	(3,162)	—
Common stock issued	—	—	—	—	9	—	212	—	—	212	—	212
Stock-based compensation	—	—	—	—	—	—	1,227	—	—	1,227	—	1,227
Repurchases of common stock	—	—	—	—	(32)	—	(1,773)	(5,485)	—	(7,258)	—	(7,258)
Shares repurchased for tax withholdings on vesting of equity awards	—	—	—	—	—	—	(56)	—	—	(56)	—	(56)
Balance as of November 4, 2018	—	—	—	—	408	—	23,285	3,487	(115)	26,657	—	26,657
Net income	—	—	—	—	—	—	—	2,724	—	2,724	—	2,724
Other comprehensive loss	—	—	—	—	—	—	—	—	(24)	(24)	—	(24)
Cumulative effect of accounting change	—	—	—	—	—	—	—	8	(1)	7	—	7
Fair value of partially vested equity awards assumed in connection with the acquisition of CA, Inc.	—	—	—	—	—	—	67	—	—	67	—	67
Dividends to common stockholders	—	—	—	—	—	—	(880)	(3,355)	—	(4,235)	—	(4,235)
Dividends to preferred stockholders	—	—	—	—	—	—	(29)	—	—	(29)	—	(29)
Common stock issued	—	—	—	—	15	—	253	—	—	253	—	253
Preferred stock issued, net			4	—		—	3,679	—	—	3,679	—	3,679
Stock-based compensation	—	—	—	—	—	—	2,260	—	—	2,260	—	2,260
Repurchases of common stock	—	—	—	—	(21)	—	(2,571)	(2,864)	—	(5,435)	—	(5,435)
Shares repurchased for tax withholdings on vesting of equity awards	—	—	—	—	(4)	—	(983)	—	—	(983)	—	(983)
Balance as of November 3, 2019	—	$ —	4	$ —	398	$ —	$25,081	$ —	$ (140)	$ 24,941	$ —	$24,941

The accompanying notes are an integral part of these consolidated financial statements.

BROADCOM INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Overview and Basis of Presentation

Overview

Broadcom Inc. ("Broadcom"), a Delaware corporation, is the successor to Broadcom Limited (now Broadcom Pte. Ltd.), a Singapore company ("Broadcom-Singapore"). On April 4, 2018, all Broadcom-Singapore outstanding ordinary shares were exchanged for newly issued shares of Broadcom common stock (the "Redomiciliation Transaction"). As a result, Broadcom-Singapore became a wholly-owned subsidiary of Broadcom. In addition, all outstanding exchangeable limited partnership units ("LP Units") of Broadcom Cayman L.P. (the "Partnership") were mandatorily exchanged (the "Mandatory Exchange") for newly issued shares of Broadcom common stock and all limited partners of the Partnership became common stockholders of Broadcom. Also, all related outstanding special preference shares of Broadcom-Singapore were automatically redeemed upon the Mandatory Exchange. The limited partners no longer hold a noncontrolling interest and we deregistered the Partnership.

The Redomiciliation Transaction was accounted for as an exchange of equity interests among entities under common control and the historical basis of accounting was retained as if the entities had always been combined for financial reporting purposes.

The financial statements relate to Broadcom-Singapore for periods prior to April 4, 2018, the effective date of the Redomiciliation Transaction, and relate to Broadcom for periods after April 4, 2018. Unless stated otherwise or the context otherwise requires, references to "Broadcom," "we," "our" and "us" mean Broadcom and its consolidated subsidiaries from and after the effective time of the Redomiciliation Transaction and, prior to that time, to our predecessor, Broadcom-Singapore.

We are a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. We develop semiconductor devices with a focus on complex digital and mixed signal complementary metal oxide semiconductor based devices and analog III-V based products. We have a history of innovation and offer thousands of products that are used in end products such as enterprise and data center networking, home connectivity, set-top boxes, broadband access, telecommunication equipment, smartphones and base stations, data center servers and storage systems, factory automation, power generation and alternative energy systems, and electronic displays. Our infrastructure software solutions enable customers to plan, develop, automate, manage, and secure applications across mainframe, distributed, mobile, and cloud platforms.

Basis of Presentation

We operate on a 52- or 53-week fiscal year ending on the Sunday closest to October 31 in a 52-week year and the first Sunday in November in a 53-week year. Our fiscal year ended November 3, 2019 ("fiscal year 2019") was a 52-week fiscal year. The first quarter of our fiscal year 2019 ended on February 3, 2019, the second quarter ended on May 5, 2019 and the third quarter ended on August 4, 2019. Our fiscal year ended November 4, 2018 ("fiscal year 2018") was a 53-week fiscal year, with the first fiscal quarter containing 14 weeks. Our fiscal year ended October 29, 2017 ("fiscal year 2017") was a 52-week fiscal year.

On November 5, 2018 (the "CA Acquisition Date"), we acquired CA, Inc. ("CA"). On November 17, 2017, we acquired Brocade Communications Systems, Inc. ("Brocade"). The accompanying consolidated financial statements include the results of operations of CA and Brocade commencing as of their respective acquisition dates. See Note 4. "Acquisitions" for additional information.

Subsequent to our acquisition of CA (the "CA Merger"), we changed our organizational structure, resulting in three reportable segments: semiconductor solutions, infrastructure software and intellectual property ("IP") licensing. Prior period segment results have been recast to conform to the current presentation. See Note 12. "Segment Information" for additional information.

The accompanying consolidated financial statements include the accounts of Broadcom and its subsidiaries and have been prepared in accordance with generally accepted principles in the United States ("GAAP"). All intercompany balances and transactions have been eliminated in consolidation.

2. Summary of Significant Accounting Policies

Foreign currency remeasurement. We operate in a U.S. dollar functional currency environment. As such, foreign currency assets and liabilities are remeasured into U.S. dollars at current exchange rates except for non-monetary items such as inventory and property, plant and equipment, which are remeasured at historical exchange rates. The effects of foreign currency remeasurement were not material for any period presented.

Use of estimates. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences could affect the results of operations reported in future periods.

Cash and cash equivalents. We consider all highly liquid investment securities with original or remaining maturities of three months or less at the date of purchase to be cash equivalents. We determine the appropriate classification of our cash and cash equivalents at the time of purchase.

Trade accounts receivable, net. Trade accounts receivable are recognized at the invoiced amount and do not bear interest. Accounts receivable are reduced by an allowance for doubtful accounts, which is our best estimate of the amount of probable credit losses in our existing accounts receivable. We determine the allowance based on customer-specific experience and the aging of such receivables, among other factors. Allowances for doubtful accounts were not material as of November 3, 2019 or November 4, 2018. Accounts receivable are also recognized net of sales returns and distributor credit allowances. These amounts are recognized when it is both probable and estimable that discounts will be granted or products will be returned. Allowances for sales returns and distributor credit allowances at November 3, 2019 and November 4, 2018 were $178 million and $161 million, respectively.

Concentrations of credit risk and significant customers. Our cash, cash equivalents and accounts receivable are potentially subject to concentration of credit risk. Cash and cash equivalents may be redeemable upon demand and are maintained with several financial institutions that management believes are of high credit quality and therefore bear minimal credit risk. We seek to mitigate our credit risks by spreading such risks across multiple counterparties and monitoring the risk profile of these counterparties. Our accounts receivable are derived from revenue earned from customers located both within and outside the U.S. We mitigate collection risks from our customers by performing regular credit evaluations of our customers' financial conditions, and require collateral, such as letters of credit and bank guarantees, in certain circumstances.

Concentration of other risks. We operate in markets that are highly competitive and rapidly changing. Significant technological changes, shifting customer needs, the emergence of competitive products with new capabilities, general economic conditions worldwide, the ability to safeguard patents and other intellectual property in a rapidly evolving market and reliance on assembly and test subcontractors, third-party wafer fabricators and independent distributors and other factors could affect our financial results.

Inventory. We value our inventory at the lower of actual cost or net realizable value of the inventory, with cost being determined under the first-in, first-out method. We record a provision for excess and obsolete inventory based primarily on our forecast of product demand and production requirements. The excess and obsolete balance determined by this analysis becomes the basis for our excess and obsolete inventory charge and the written-down value of the inventory becomes its new cost basis.

Retirement benefits. Post-retirement benefit plan assets and liabilities are estimates of benefits that we expect to pay to eligible retirees. We consider various factors in determining the value of our post-retirement plan assets and liabilities, including the number of employees that we expect to receive benefits and other actuarial assumptions.

For defined benefit pension plans, we consider various factors in determining our respective pension liabilities and net periodic benefit costs, including the number of employees that we expect to receive benefits, their salary levels and years of service, the expected return on plan assets, the discount rate, the timing of the payment of benefits, and other actuarial assumptions. If the actual results and events of the retirement benefit plans differ from our current assumptions, the benefit obligations may be over- or under-valued.

The key benefit plan assumptions are the discount rate and the expected rate of return on plan assets. The U.S. discount rates are based on the results of matching expected plan benefit payments with cash flows from a hypothetical yield curve constructed with high-quality corporate bond yields. The U.S. expected rate of return on plan assets is set equal to the discount rate due to the implementation of our fully-matched, liability-driven investment strategy.

For the non-U.S. plans, we set assumptions specific to each country. We have elected to measure post-retirement benefit plan and defined benefit pension plan assets and liabilities as of October 31, which is the month-end that is closest to our fiscal year-ends.

Derivative instruments. We are subject to foreign currency risks for transactions denominated in foreign currencies, primarily the Singapore Dollar, Israeli Shekel, Euro, Japanese Yen and Indian Rupee. Therefore, we enter into foreign exchange forward contracts to manage financial exposures resulting from the changes in the exchange rates of these foreign currencies. These contracts are designated at inception as hedges of the related foreign currency exposures, which include committed and forecasted revenue and expense transactions that are denominated in currencies other than the functional currency of the subsidiary which has the exposure. We exclude time value from the measurement of effectiveness. To achieve hedge accounting, contracts must reduce the foreign currency exchange rate risk otherwise inherent in the amount and duration of the hedged exposures and comply with established risk management policies; our hedging contracts generally mature within three months. We do not use derivative financial instruments for speculative or trading purposes.

We designate our forward contracts as either cash flow or fair value hedges. All derivatives are recognized on the consolidated balance sheets at their fair values based on Level 2 inputs as defined in the fair value hierarchy. The accounting for gains and losses resulting from changes in fair value depends on the use of the derivative and whether it is designated and qualifies for hedge accounting. For derivative instruments that are designated and qualify as fair value hedges, changes in value of the instruments are recognized in net income in the current period. Such hedges are recognized in net income and are offset by the changes in fair value of the underlying assets or liabilities being hedged. For derivative instruments that are designated and qualify as cash flow hedges, changes in the value of the effective portion of the derivative instrument are recognized in accumulated other comprehensive loss, a component of stockholders' equity. These amounts are then reclassified and recognized in net income when either the forecasted transaction affects earnings or it becomes probable the forecasted transaction will not occur. Changes in the fair value of the ineffective portion of derivative instruments are recognized in net income in the current period, which have not been material to date. Changes in the value of derivative instruments not designated as hedges are recognized in other income, net, in our consolidated statements of operations. We did not have any outstanding foreign exchange forward contracts as of November 3, 2019 or November 4, 2018.

Property, plant and equipment. Property, plant and equipment are stated at cost less accumulated depreciation and amortization. Additions, improvements and major renewals are capitalized, and maintenance, repairs and minor renewals are expensed as incurred. Assets are held in construction in progress until placed in service, upon which date, we begin to depreciate these assets. When assets are retired or disposed of, the assets and related accumulated depreciation and amortization are removed from our property, plant and equipment balances and the resulting gain or loss is reflected in the consolidated statements of operations. Buildings and leasehold improvements are generally depreciated over 15 to 40 years, or over the lease period, whichever is shorter, and machinery and equipment are generally depreciated over three to ten years. We use the straight-line method of depreciation for all property, plant and equipment.

Fair value measurement. Fair value is defined as the price that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A three level hierarchy is applied to prioritize the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy under the guidance for fair value measurements are described below:

Level 1 — Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Our Level 1 assets include cash equivalents, banker's acceptances, trading securities investments and investment funds. We measure trading securities investments and investment funds at quoted market prices as they are traded in an active market with sufficient volume and frequency of transactions.

Level 2 — Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified contractual term, a Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 — Level 3 inputs are unobservable inputs for the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date. Level 3 assets and liabilities include cost method investments, goodwill, intangible assets, and property, plant and equipment, which are measured at fair value using a discounted cash flow approach when they are impaired. Quantitative information for Level 3 assets and liabilities reviewed at each reporting period includes indicators of significant deterioration in the earnings performance, credit rating, asset quality, business prospects of the investee, and financial indicators of the investee's ability to continue as a going concern.

Business combinations. We account for business combinations under the acquisition method of accounting, which requires us to recognize separately from goodwill the assets acquired and the liabilities assumed at their acquisition date fair values. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recognized in our consolidated statements of operations. Accounting for business combinations requires our management to make significant estimates and assumptions, especially at the acquisition date including our estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies, and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based, in part, on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain acquired intangible assets under the income approach include growth in future expected cash flows from product sales, customer contracts and acquired technologies, revenue growth rate, customer ramp-up period, technology obsolescence rates, expected costs to develop in-process research and development ("IPR&D") into commercially viable products, estimated cash flows from the projects when completed and discount rates. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

Goodwill. Goodwill represents the excess of purchase price and related costs over the value assigned to the net tangible and identifiable intangible assets of businesses acquired. Goodwill is not amortized but is reviewed annually (or more frequently if impairment indicators arise) for impairment. To review for impairment we first assess qualitative factors to determine whether events or circumstances lead to a determination that it is more likely than not that the fair value of any of our reporting units is less than its carrying amount. Our qualitative assessment of the recoverability of goodwill, whether performed annually or based on specific events or circumstances, considers various macroeconomic, industry-specific and company-specific factors. Those factors include: (i) severe adverse industry or economic trends; (ii) significant company-specific actions, including exiting an activity in conjunction with restructuring of operations; (iii) current, historical or projected deterioration of our financial performance; or (iv) a sustained decrease in our market capitalization below our net book value. After assessing the totality of events and circumstances, if we determine that it is not more likely than not that the fair value of any of our reporting units is less than its carrying amount, no further assessment is performed. If we determine that it is more likely than not that the fair value of any of our reporting units is less than its carrying amount, we calculate the fair value of that reporting unit and compare the fair value to the reporting unit's net book value. If the fair value of the reporting unit is greater than its net book value, there is no impairment. Otherwise, we calculate the implied fair value of goodwill by deducting the fair value of all tangible and intangible assets, excluding goodwill, of the reporting unit from the fair value of the reporting unit. The implied fair value of goodwill is compared to the carrying value of goodwill. If the implied fair value of goodwill is less than the carrying value of goodwill, an impairment loss is recognized equal to the difference. Determining the fair value of a reporting unit involves the use of significant estimates and assumptions.

Long-lived assets. Purchased finite-lived intangible assets are carried at cost less accumulated amortization. Amortization is recognized over the periods during which the intangible assets are expected to contribute to our cash flows. Purchased IPR&D projects are capitalized at fair value as an indefinite-lived intangible asset and assessed for impairment thereafter. Upon completion of each underlying project, IPR&D assets are reclassified as amortizable purchased intangible assets and amortized over their estimated useful lives. If an IPR&D project is abandoned, we recognize the carrying value of the related intangible asset in our consolidated statements of operations in the period it is abandoned. On a quarterly basis, we monitor factors and changes in circumstances that could indicate carrying amounts of long-lived assets, including purchased intangible assets and property, plant and equipment, may not be recoverable. Factors we consider important which could trigger an impairment review include (i) significant under-performance relative to historical or projected future operating results, (ii) significant changes in the manner of our use of the acquired assets or the strategy for our overall business, and (iii) significant negative industry or economic trends. An impairment loss must be measured if the sum of the expected future cash flows (undiscounted and before interest) from the use and eventual disposition of the asset (or asset group) is less than the net book value of the asset (or asset group). The amount of the impairment loss will generally be measured as the difference between the net book value of the asset (or asset group) and the estimated fair value.

Warranty. We accrue for the estimated costs of product warranties at the time revenue is recognized. Product warranty costs are estimated based upon our historical experience and specific identification of the products requirements, which may fluctuate based on product mix. Additionally, we accrue for warranty costs associated with occasional or unanticipated product quality issues if a loss is probable and can be reasonably estimated.

Revenue recognition. We account for a contract with a customer when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable we will collect substantially all of the consideration we are entitled to. Revenue is recognized when, or as, performance obligations are satisfied by transferring control of a promised product or service to a customer.

Nature of Products and Services

Our products and services can be broadly categorized as sales of products and subscriptions and services. The following is a description of the principal activities from which we generate revenue.

Products. We recognize revenue from sales to direct customers and distributors when control transfers to the customer. Rebates and incentives offered to distributors, which are earned when sales to end customers are completed, are estimated at the point of revenue recognition. We have elected to exclude from the transaction price any taxes collected from a customer and to account for shipping and handling activities performed after a customer obtains control of the product as activities to fulfill the promise to transfer the product.

Subscriptions and services. Our subscriptions and services revenue consists of sales and royalties from software arrangements, support services, professional services, transfer of IP, and non-recurring engineering ("NRE") arrangements.

Revenue from software arrangements primarily consists of fees, which may be paid either at contract inception or in installments over the contract term, that provide customers with a right to use the software, access general support and maintenance, and utilize our professional services.

Our software licenses have standalone functionality from which customers derive benefit, and the customer obtains control of the software when it is delivered or made available for download. We believe that for the majority of software arrangements, customers derive significant benefit from the ongoing support we provide. Our CA-related subscriptions and services arrangements permit our customers to unilaterally terminate or cancel these arrangements at any time at the customer's convenience, referred to as termination for convenience provisions, without substantive termination penalty and receive a pro-rata refund of any prepaid fees. Accordingly, we account for arrangements with these termination for convenience provisions as a series of daily contracts, resulting in a ratable revenue recognition of software revenue over the contractual period.

Support services consist primarily of telephone support and the provision of unspecified updates and upgrades on a when-and-if-available basis. Support services represent stand-ready obligations for which revenue is recognized ratably over the term of the arrangement.

Professional services consist of implementation, consulting, customer education and customer training services. The obligation to provide professional services is generally satisfied over time, with the customer simultaneously receiving and consuming the benefits as we satisfy our performance obligations.

Rights to our IP are either sold or licensed to a customer. IP revenue recognition is dependent on the nature and terms of each agreement. We recognize IP revenue upon delivery of the IP if there are no substantive future obligations to perform under the arrangement. Sales-based or usage-based royalties from the license of IP are recognized at the later of the period the sales or usages occur or the satisfaction of the performance obligation to which some or all of the sales-based or usage-based royalties have been allocated.

There are two main categories of NRE contracts which we enter into with our customers: (a) NRE contracts in which we develop a custom chip and (b) NRE contracts in which we accelerate our development of a new chip upon the customer's request. The majority of our NRE contract revenues meet the over time criteria. As such, revenue is recognized over the development period with the measure of progress using the input method based on costs incurred to total cost ("cost-to-cost") as the services are provided. For NRE contracts that do not meet the over time criteria, revenue is recognized at a point in time when the NRE services are complete.

Material rights. Contracts with customers may also include material rights that are also performance obligations. These include the right to renew or receive products or services at a discounted price in the future. Revenue allocated to material rights is recognized when the customer exercises the right or the right expires.

Arrangements with Multiple Performance Obligations

Our contracts may contain more than one of the products and services listed above, each of which is separately accounted for as a distinct performance obligation.

Allocation of consideration. We allocate total contract consideration to each distinct performance obligation in a bundled arrangement on a relative standalone selling price basis. The standalone selling price reflects the price we would charge for a specific product or service if it were sold separately in similar circumstances and to similar customers.

Standalone selling price. When available, we use directly observable transactions to determine the standalone selling prices for performance obligations. Our estimates of standalone selling price for each performance obligation require judgment that considers multiple factors, including, but not limited to, historical discounting trends for products and services and pricing practices through different sales channels, gross margin objectives, internal costs, competitor pricing strategies, technology lifecycles and market conditions.

We separately determine the standalone selling prices by product or service type. Additionally, we segment the standalone selling prices for products where the pricing strategies differ, and where there are differences in customers and circumstances that warrant segmentation.

We also estimate the standalone selling price of our material rights. Lastly, we estimate the value of the customer's option to purchase or receive additional products or services at a discounted price by estimating the incremental discount the customer would obtain when exercising the option and the likelihood that the option would be exercised.

Other Policies and Judgments

Contract modifications. We may modify contracts to offer customers additional products or services. Each of the additional products and services are generally considered distinct from those products or services transferred to the customer before the modification. We evaluate whether the contract price for the additional products and services reflects the standalone selling price as adjusted for facts and circumstances applicable to that contract. In these cases, we account for the additional products or services as a separate contract. In other cases where the pricing in the modification does not reflect the standalone selling price as adjusted for facts and circumstances applicable to that contract, we account for the additional products or services as part of the existing contract on a prospective basis, on a cumulative catch-up basis, or on a combination of both based on the nature of modification. In instances where the pricing in the modification offers the customer a credit for a prior arrangement, we adjust our variable consideration reserves for returns and other concessions.

Right of return. Certain contracts contain a right of return that allows the customer to cancel all or a portion of the product or service and receive a credit. We estimate returns based on historical returns data which is constrained to an amount for which a material revenue reversal is not probable. We do not recognize revenue for products or services that are expected to be returned.

Transition practical expedient elected. We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed. For contracts that were modified before the beginning of the earliest reporting period presented, we have not retrospectively restated the contract for those modifications. We have disclosed the aggregate effect of all modifications when identifying the satisfied and unsatisfied performance obligations for purposes of determining the transaction price and allocating the transaction price at transition.

Research and development. Research and development expense consists primarily of personnel costs for our engineers and third parties engaged in the design and development of our products, software and technologies, including salary, bonus and stock-based compensation expense, project material costs, services and depreciation. Such costs are charged to research and development expense as they are incurred.

Stock-based compensation expense. We recognize compensation expense for time-based restricted stock units ("RSUs") using the straight-line amortization method based on the fair value of RSUs on the date of grant. The fair value of RSUs is the closing market price of Broadcom common stock on the date of grant, reduced by the present value of dividends expected to be paid on Broadcom common stock prior to vesting. We recognize compensation expense for time-based stock options and employee stock purchase plan rights under the Broadcom Inc. Employee Stock Purchase Plan, as amended ("ESPP") based on the estimated grant-date fair value determined using the Black-Scholes valuation model with a straight-line amortization method.

Certain equity awards include both service and market conditions. The fair value of market-based awards is estimated on the date of grant using the Monte Carlo simulation technique. Compensation expense for market-based awards is amortized based upon a graded vesting method over the service period.

We estimate forfeitures expected to occur and recognize stock-based compensation expense for such awards expected to vest. Changes in the estimated forfeiture rates can have a significant effect on stock-based compensation expense since the effect of adjusting the rate is recognized in the period the forfeiture estimate is changed.

Shipping and handling costs. Our shipping and handling costs charged to customers are included in net revenue and the associated expense is included in total cost of revenue in the consolidated statements of operations for all periods presented.

Litigation and settlement cost. We are involved in legal actions and other matters arising in our recent business acquisitions and in the normal course of business. We recognize an estimated loss contingency when the outcome is probable prior to issuance of the consolidated financial statements and we are able to reasonably estimate the amount or range of any possible loss.

Taxes on income. We account for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the consolidated financial statements and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

We recognize net deferred tax assets to the extent we believe these assets will more likely than not be realized. In making such determination, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. If we determine that we are able to realize our deferred income tax assets in the future in excess of their net carrying values, we adjust the valuation allowance and reduce the provision for income taxes. Likewise, if we determine that we are not able to realize all or part of our net deferred tax assets, we increase the provision for income taxes in the period such determination is made.

We account for uncertainty in income taxes in accordance with the applicable accounting guidance on income taxes. This guidance provides that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits.

Net income per share. Basic net income per share is computed by dividing net income attributable to common stock by the weighted-average number of shares of common stock outstanding during the period. Diluted net income per share is computed by dividing net income attributable to common stock by the weighted-average number of shares of common stock and potentially dilutive shares of common stock outstanding during the period. Diluted shares outstanding include the dilutive effect of in-the-money stock options, unvested RSUs and ESPP rights (together referred to as “equity awards”), as well as convertible preferred stock and LP Units. Potentially dilutive shares whose effect would have been antidilutive are excluded from the computation of diluted net income per share.

The dilutive effect of equity awards is calculated based on the average stock price for each fiscal period, using the treasury stock method. Under the treasury stock method, the amount the employee must pay for exercising stock options and purchasing shares under the ESPP and the amount of compensation cost for future service that we have not yet recognized are collectively assumed to be used to repurchase shares. The dilutive effect of convertible preferred stock and LP Units is calculated using the if-converted method. The if-converted method assumes that these securities were converted at the beginning of the reporting period to the extent that the effect is dilutive.

Reclassifications. Certain reclassifications have been made to the prior period consolidated balance sheet, statements of operations, statements of cash flows and statements of equity. These reclassifications have no impact on the previously reported total stockholders’ equity, net income or net cash activities.

Recently Adopted Accounting Guidance

In the first quarter of fiscal year 2019, we adopted the Financial Accounting Standards Board (“FASB”) guidance issued in March 2017 that requires an employer to present the service cost component of net periodic benefit cost in the same income statement line item as other employee compensation costs arising from services rendered during the period. Other components of the net periodic benefit cost are presented separately from the service cost component. We adopted the guidance using a permitted practical expedient that uses the amounts disclosed in the pension and other post-retirement benefit plans note for the prior comparative periods as the estimation basis for applying the retrospective presentation requirements. The adoption did not have a material impact on the consolidated statements of operations presented herein.

In the first quarter of fiscal year 2019, we adopted the guidance issued in January 2016 that changes the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. This guidance requires the remeasurement of equity investments not accounted for under the equity method to be measured at fair value and any changes in fair value recognized in net income. The guidance allows for election of a measurement alternative for equity securities without readily determinable fair values to be measured at cost less impairment, adjusted for observable price changes. We adopted this guidance using the modified retrospective method for our marketable equity securities and a prospective approach for non-marketable equity securities using the measurement alternative. Upon adoption, we recognized an $8 million increase to retained earnings and a $1 million increase to accumulated other comprehensive loss. During the fiscal year ended November 3, 2019, we also recognized $145 million of unrealized gains on equity securities within other income, net in our consolidated statements of operations.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (“Topic 606”). We adopted Topic 606 effective November 5, 2018 using the modified retrospective method. Reporting periods prior to the adoption of the new revenue standard are presented in accordance with Accounting Standards Codification 605, Revenue Recognition (“Topic 605”), while reporting periods after adoption are presented in accordance with the new revenue standard. The cumulative effect adjustment as of November 5, 2018 to retained earnings was not significant.

Recent Accounting Guidance Not Yet Adopted

In February 2016, the FASB issued guidance related to the accounting for leases, which among other things, requires a lessee to recognize lease assets and lease liabilities on the balance sheet for operating leases. This guidance will be effective for the first quarter of our fiscal year ending November 1, 2020 (“fiscal year 2020”). We will adopt this guidance using the optional transition method and will not restate comparative prior periods. We are finalizing the implementation of related systems, policies, processes and internal controls to comply with this guidance. Based on our lease portfolio as of November 3, 2019, we expect the adoption of the new leasing guidance to result in recognition of operating right-of-use assets and corresponding liabilities on our consolidated balance sheet within a range of $500 million to $600 million, primarily related to real estate.

3. Revenue from Contracts with Customers

Disaggregation

We have considered (1) information that is regularly reviewed by our Chief Executive Officer, who has been identified as the Chief Operating Decision Maker (the “CODM”) as defined by the authoritative guidance on segment reporting, in evaluating financial performance and (2) disclosures presented outside of our financial statements in our earnings releases and used in investor presentations to disaggregate revenues. The principal category we use to disaggregate revenues is the nature of our products and subscriptions and services, as presented in our consolidated statements of operations. In addition, revenues by reportable segment are presented in Note 12. “Segment Information”.

The following table presents revenue disaggregated by type of revenue and by region:

	Fiscal Year Ended November 3, 2019			
	Americas	Asia Pacific	Europe, the Middle East and Africa	Total
	(In millions)			
Products	$ 2,023	$ 14,857	$ 1,237	$ 18,117
Subscriptions and services[a]	3,126	374	980	4,480
Total	$ 5,149	$ 15,231	$ 2,217	$ 22,597

(a) Subscriptions and services predominantly includes software licenses with termination for convenience clauses.

Although we recognize revenue for the majority of our products when title and control transfer in Penang, Malaysia, we disclose net revenue by region based on the geographic shipment or delivery location specified by distributors, OEMs, contract manufacturers, channel partners, or software customers.

Contract Balances

Contract assets and contract liabilities balances for the periods indicated below were as follows:

	Contract Assets	Contract Liabilities
	(In millions)	
Opening balance November 5, 2018[a]	$ 18	$ 272
Closing balance November 3, 2019	$ 259	$ 1,808

(a) We adopted Topic 606 immediately prior to the CA Merger. Accordingly, the opening balance does not include contract assets or contract liabilities associated with CA.

Changes in our contract assets and contract liabilities primarily result from the timing difference between our performance and the customer's payment. We fulfill our obligations under a contract with a customer by transferring products and services in exchange for consideration from the customer. We recognize a contract asset when we transfer products or services to a customer and the right to consideration is conditional on something other than the passage of time. Accounts receivable are recorded when the customer has been billed or the right to consideration is unconditional. We recognize contract liabilities when we have received consideration or an amount of consideration is due from the customer and we have a future obligation to transfer products or services. Contract liabilities include amounts billed or collected and advanced payments on contracts or arrangements which may include termination for convenience provisions. The amount of revenue recognized during the fiscal year ended November 3, 2019 that was included in the contract liabilities balance as of November 5, 2018 was $200 million.

Remaining Performance Obligations

Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied. It includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods and does not include CA contracts where the customer is not committed. The customer is not considered committed when termination for convenience without payment of a substantive penalty exists. This has been extended to all CA customers, either contractually or through customary business practice. Additionally, as a practical expedient, we have not included contracts that have an original duration of one year or less nor have we included contracts with sales-based and usage-based royalties promised in exchange for a license of intellectual property.

Because the substantial majority of our customer contracts allow our customers to terminate for convenience or have an original duration of one year or less, the total amount of the transaction price allocated to remaining performance obligations as of November 3, 2019 was not significant. Since our customers generally do not exercise their termination for convenience rights and the majority of the contracts we execute for products, as well as subscriptions and services, have a duration of one year or less, our remaining performance obligations are not indicative of revenue for future periods.

Contract Costs

We have applied the practical expedient to expense commission costs as incurred for costs to obtain a contract when the amortization period would have been one year or less. As a result, no commission costs are capitalized.

We recognize an asset for costs incurred to fulfill a contract that are not within the scope of other accounting literature. We have not incurred any such costs and, as a result, no costs to fulfill a contract have been capitalized.

Topic 606 Adoption

We applied Topic 606 using the modified retrospective method for all contracts not completed as of the date of adoption. For contracts that were modified before the effective date, we reflected the aggregate effect of all modifications when identifying the performance obligations and allocating the transaction price at transition, which did not have a material effect on the adjustment to retained earnings as of November 5, 2018.

We adopted Topic 606 immediately prior to the CA Merger. Accordingly, the adoption adjustments presented below excluded CA. As a result of applying the modified retrospective method, the following adjustments were made to selected consolidated balance sheet line items as of November 5, 2018:

Balance Sheet	**Ending Balance as of November 4, 2018**	**Adjustments Due to Topic 606**	**Opening Balance as of November 5, 2018**
		(In millions)	
ASSETS			
Trade accounts receivable, net	$ 3,325	$ 11	$ 3,336
Other current assets	$ 366	$ 10	$ 376
Other long-term assets	$ 707	$ 20	$ 727
LIABILITIES			
Other current liabilities	$ 812	$ 35	$ 847
Other long-term liabilities	$ 3,636	$ 6	$ 3,642

Impact of New Revenue Guidance on Net Revenue

The following table compares net revenue for the period presented to the pro forma amounts had the previous guidance been in effect. No other amounts in the consolidated statements of operations for the fiscal year ended November 3, 2019 or in the consolidated balance sheet as of November 3, 2019 were significantly affected by the new revenue guidance.

Statement of Operations	Fiscal Year Ended November 3, 2019 Pro forma as if the previous accounting was in effect	Effect of Change	As Reported
	(In millions)		
Net revenue:			
Products	$ 18,117	$ —	$ 18,117
Subscriptions and services	4,257	223	4,480
Total net revenue	$ 22,374	$ 223	$ 22,597

4. Acquisitions

Acquisition of CA, Inc.

On November 5, 2018, we acquired CA, which was a leading provider of information technology management software and solutions. We acquired CA to enhance our infrastructure software capabilities. We financed the CA Merger with the net proceeds from borrowings under the Original 2019 Term Loans, as defined in Note 9. "Borrowings," as well as with cash on hand of the combined companies.

Purchase Consideration

	(In millions)
Cash paid for outstanding CA common stock	$ 18,402
Cash paid by Broadcom to retire CA's term loan	274
Cash paid for vested CA equity awards	101
Fair value of partially vested assumed equity awards	67
Total purchase consideration	18,844
Less: cash acquired	2,750
Total purchase consideration, net of cash acquired	$ 16,094

All vested in-the-money CA stock options, after giving effect to any acceleration, and all outstanding deferred stock units were cashed out upon the completion of the CA Merger. We assumed all unvested CA equity awards held by continuing employees. The portion of the fair value of partially vested equity awards associated with prior service of CA employees represents a component of the total consideration as presented above and was valued based on our share price as of the CA Acquisition Date. The following table presents our allocation of the total purchase price, net of cash acquired:

	Fair Value
	(In millions)
Current assets	$ 1,665
Goodwill	9,796
Intangible assets	12,045
Other long-term assets	240
Total assets acquired	23,746
Current liabilities	(1,966)
Long-term debt	(2,255)
Other long-term liabilities	(3,431)
Total liabilities assumed	(7,652)
Fair value of net assets acquired	$ 16,094

Goodwill is primarily attributable to the assembled workforce and anticipated synergies and economies of scale expected from the integration of the CA business. The synergies include certain cost savings, operating efficiencies, and other strategic benefits projected to be achieved as a result of the CA Merger. Goodwill is not deductible for tax purposes.

Current assets included assets held-for-sale related to CA's Veracode business, which was not aligned with our strategic objectives. On December 31, 2018, we sold this business to Thoma Bravo, LLC for cash consideration of $950 million, before working capital adjustments. We do not have any material continuing involvement with this business and have presented its results in discontinued operations. Current assets also included $80 million of real properties held-for-sale. During fiscal year 2019, we sold a portion of these real properties for $62 million and recognized a loss of $8 million.

Our results of continuing operations for fiscal year 2019 included $3,377 million of net revenue attributable to CA. It was impracticable to determine the effect on net income attributable to CA as we had integrated a substantial portion of CA into our ongoing operations during the year. The results of operations of CA were included in our infrastructure software segment. Transaction costs related to the CA Merger of $73 million were included in selling, general and administrative expense for fiscal year 2019.

Intangible Assets

	Fair Value	Weighted-Average Amortization Periods
	(In millions)	(In years)
Developed technology	$ 4,957	6
Customer contracts and related relationships	4,190	6
Order backlog	2,569	3
Trade name and other	137	5
Total identified finite-lived intangible assets	11,853	
IPR&D	192	N/A
Total identified intangible assets	$ 12,045	

Developed technology relates to products used for mission critical business tools for processes and applications, as well as products used for cloud-based planning, development, management and security tools. We valued the developed technology using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the developed technology less charges representing the contribution of other assets to those cash flows. The economic useful life was determined based on the technology cycle related to each developed technology, as well as the cash flows over the forecast period.

Customer contracts and related relationships represent the fair value of future projected revenue that will be derived from sales of products to existing customers of CA. Customer contracts and related relationships were valued using the with-and-without-method under the income approach. In the with-and-without method, the fair value was measured by the difference between the present values of the cash flows with and without the existing customers in place over the period of time necessary to reacquire the customers. The economic useful life was determined by evaluating many factors, including the useful life of other intangible assets, the length of time remaining on the acquired contracts and the historical customer turnover rates.

Order backlog represents business under existing contractual obligations. The fair value of backlog was determined using the multi-period excess earnings method under the income approach based on expected operating cash flows from future contractual revenue. The economic useful life was determined based on the expected life of the backlog and the cash flows over the forecast period.

Trade name relates to the "CA" trade name. The fair value was determined by applying the relief-from-royalty method under the income approach. This method is based on the application of a royalty rate to forecasted revenue under the trade name. The economic useful life was determined based on the expected life of the trade name and the cash flows anticipated over the forecast period.

The fair value of IPR&D was determined using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the IPR&D, less charges representing the contribution of other assets to those cash flows.

We believe the amounts of purchased intangible assets recorded above represent the fair values of, and approximate the amounts a market participant would pay for, these intangible assets as of the CA Acquisition Date.

The following table summarizes the details of IPR&D by category as of the CA Acquisition Date:

Description	IPR&D	Percentage of Completion	Estimated Cost to Complete	Expected Completion Date (By Fiscal Year)
		(Dollars in millions)		
Mainframe	$ 178	67%	$ 138	2019
Enterprise Solutions	$ 14	63%	$ 12	2019

Discount rates of 12% and 14% were applied to the projected cash flows to reflect the risk related to these mainframe and enterprise solutions IPR&D projects, respectively.

As of November 3, 2019, these IPR&D projects are expected to be fully placed in service during the first half of fiscal year 2020.

Unaudited Pro Forma Information

The following unaudited pro forma financial information presents combined results of operations for each of the periods presented, as if CA had been acquired as of the beginning of fiscal year 2018. The unaudited pro forma information includes adjustments to amortization and depreciation for intangible assets and property, plant and equipment acquired, adjustments to stock-based compensation expense, interest expense for the additional indebtedness incurred to complete the acquisition, restructuring charges related to the acquisition and transaction costs. For fiscal year 2018, non-recurring pro forma adjustments directly attributable to the CA Merger included transaction costs of $180 million. The unaudited pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisition actually occurred at the beginning of fiscal year 2018 or of the results of our future operations of the combined business.

	Fiscal Year	
	2019	2018
	(In millions)	
Pro forma net revenue*	$ 21,697	$ 24,451
Pro forma net income attributable to common stock	$ 2,535	$ 9,783

***** Pro forma net revenue was presented under Topic 606 for fiscal year 2019 and under Topic 605 for fiscal year 2018.

Acquisition of Brocade

On November 17, 2017 (the “Brocade Acquisition Date”), we acquired Brocade (the “Brocade Merger”). Brocade was a supplier of networking hardware, software and services, including Fibre Channel Storage Area Network (“FC SAN”) solutions and Internet Protocol Networking (“IP Networking”) solutions. We acquired Brocade to enhance our position as a provider of enterprise storage connectivity solutions, broaden our portfolio for enterprise storage, and to increase our ability to address the evolving needs of our original equipment manufacturer (“OEM”) customers. We financed the Brocade Merger with a portion of the net proceeds from the issuance of the 2017 Senior Notes, as defined in Note 15. “Condensed Consolidating Financial Information,” as well as with cash on hand.

Purchase Consideration

	(In millions)
Cash paid for outstanding Brocade common stock	$ 5,298
Cash paid by Broadcom to retire Brocade’s term loan	701
Cash paid for Brocade equity awards	31
Fair value of partially vested assumed equity awards	8
Total purchase consideration	6,038
Less: cash acquired	1,250
Total purchase consideration, net of cash acquired	$ 4,788

We assumed all unvested Brocade stock options, RSUs and performance stock units ("PSUs") held by continuing employees. The portion of the fair value of partially vested equity awards associated with prior service of Brocade employees represents a component of the total consideration as presented above. All vested in-the-money Brocade stock options, after giving effect to any acceleration, were cashed out upon the completion of the Brocade Merger. RSUs and PSUs were valued based on our share price as of the Brocade Acquisition Date.

The following table presents our allocation of the total purchase price, net of cash acquired:

	Fair Value
	(In millions)
Current assets	$ 1,297
Goodwill	2,187
Intangible assets	3,396
Other long-term assets	82
Total assets acquired	6,962
Current portion of long-term debt	(856)
Other current liabilities	(374)
Long-term debt	(38)
Other long-term liabilities	(906)
Total liabilities assumed	(2,174)
Fair value of net assets acquired	$ 4,788

Goodwill is primarily attributable to the assembled workforce and anticipated synergies and economies of scale expected from the integration of the Brocade business. The synergies include certain cost savings, operating efficiencies, and other strategic benefits projected to be achieved as a result of the Brocade Merger. Goodwill is not deductible for tax purposes.

Current assets included assets held-for-sale related to Brocade's IP Networking business, which was not aligned with our strategic objectives. On December 1, 2017, we sold this business to ARRIS International plc ("ARRIS") for cash consideration of $800 million, before contractual working capital adjustments. In connection with this sale, we indemnified ARRIS for $116 million of potential income tax liabilities. We provided transitional services as short-term assistance to ARRIS in assuming the operations of the purchased business. We do not have any material continuing involvement with this business and have presented its results in discontinued operations.

Current assets also included assets held-for-sale for Brocade's headquarters, which was sold for $224 million during fiscal year 2018, for no gain or loss.

Our results of continuing operations for fiscal year 2018 included $1,780 million of net revenue attributable to Brocade. It was impracticable to determine the effect on net income attributable to Brocade as we had integrated a substantial portion of Brocade into our ongoing operations. The results of operations of Brocade were primarily included in our infrastructure software segment. Transaction costs of $29 million related to the Brocade Merger were included in selling, general and administrative expense for fiscal year 2018.

Intangible Assets

	Fair Value	Weighted-Average Amortization Periods
	(In millions)	(In years)
Developed technology	$ 2,925	10
Customer contracts and related relationships	255	11
Trade name and other	61	6
Total identified finite-lived intangible assets	3,241	
IPR&D	155	N/A
Total identified intangible assets	$ 3,396	

Developed technology relates to products for FC SAN applications. We valued the developed technology using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the developed technology less charges representing the contribution of other assets to those cash flows. The economic useful life was determined based on the technology cycle related to each developed technology, as well as the cash flows over the forecast period.

Customer contracts and related relationships represent the fair value of future projected revenue that will be derived from sales of products to existing customers of Brocade. Customer contracts and related relationships were valued using the distributor method and the with-and-without-method under the income approach. The distributor method determines the fair value by measuring the economic profits generated by an intermediary, which in our case represented OEM customers. In the with-and-without method, the fair value was measured by the difference between the present values of the cash flows with and without the existing customers in place over the period of time necessary to reacquire the customers. In both instances, the economic useful life was determined based on historical customer turnover rates.

Trade name relates to the “Brocade” trade name. The fair value was determined by applying the relief-from-royalty method under the income approach. This method is based on the application of a royalty rate to forecasted revenue under the trade name. The economic useful life was determined based on the expected life of the trade name and the cash flows anticipated over the forecast period.

The fair value of IPR&D was determined using the multi-period excess earnings method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the IPR&D, less charges representing the contribution of other assets to those cash flows.

We believe the amounts of purchased intangible assets recorded above represent the fair values of, and approximate the amounts a market participant would pay for, these intangible assets as of the Brocade Acquisition Date.

The following table summarizes the details of IPR&D by category at the Brocade Acquisition Date:

Description	**IPR&D**	**Percentage of Completion**	**Estimated Cost to Complete**	**Expected Completion Date (By Fiscal Year)**
		(Dollars in millions)		
Directors	$ 64	72%	$ 45	2019
Switches	$ 50	81%	$ 21	2018
Embedded	$ 31	74%	$ 22	2019
Networking software	$ 10	73%	$ 27	2018

A discount rate of 11% was applied to the projected cash flows to reflect the risk related to these IPR&D projects. The discount rate represented a premium of 1% over the weighted-average cost of capital to reflect the higher risk and uncertainty of the cash flows for IPR&D relative to the overall businesses.

As of November 3, 2019, these IPR&D projects were substantially complete and placed in service.

Unaudited Pro Forma Information

The following unaudited pro forma financial information presents combined results of operations for each of the periods presented, as if Brocade had been acquired as of the beginning of fiscal year 2017. The unaudited pro forma information includes adjustments to amortization and depreciation for intangible assets and property, plant and equipment acquired, adjustments to stock-based compensation expense, the purchase accounting effect on inventory acquired, restructuring charges related to the acquisition and transaction costs. The unaudited pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisition actually occurred at the beginning of fiscal year 2017 or of the results of our future operations of the combined business.

	Fiscal Year	
	2018	2017
	(In millions)	
Pro forma net revenue*	$ 20,978	$ 19,441
Pro forma net income attributable to common stock	$ 12,408	$ 986

____

* Pro forma net revenue was presented under Topic 605 for fiscal years 2018 and 2017.

5. Supplemental Financial Information

Cash Equivalents

Cash equivalents included $850 million and $1,406 million of time deposits as of November 3, 2019 and November 4, 2018, respectively. As of November 3, 2019 and November 4, 2018, cash equivalents also included $649 million and $202 million, respectively, of money-market funds. For time deposits, carrying value approximates fair value due to the short-term nature of the instruments. The fair value of money-market funds, which was consistent with their carrying value, was determined using unadjusted prices in active, accessible markets for identical assets, and as such they were classified as Level 1 assets in the fair value hierarchy.

Accounts Receivable Factoring

We sell certain of our trade accounts receivable on a non-recourse basis to third-party financial institutions pursuant to factoring agreements. We account for these transactions as sales of receivables and present cash proceeds as cash provided by operating activities in the consolidated statements of cash flows. Total trade accounts receivable sold under the factoring agreements were $1,151 million and $362 million during fiscal years 2019 and 2018, respectively. Factoring fees for the sales of receivables were recorded in other income, net and were not material for any period presented.

Inventory

	November 3, 2019	November 4, 2018
	(In millions)	
Finished goods	$ 339	$ 483
Work-in-process	414	505
Raw materials	121	136
Total inventory	$ 874	$ 1,124

Property, Plant and Equipment, Net

	November 3, 2019	November 4, 2018
	(In millions)	
Land	$ 189	$ 189
Construction in progress	85	67
Buildings and leasehold improvements	1,078	1,016
Machinery and equipment	3,544	3,257
Total property, plant and equipment	4,896	4,529
Accumulated depreciation and amortization	(2,331)	(1,894)
Total property, plant and equipment, net	$ 2,565	$ 2,635

Depreciation expense was $569 million, $515 million and $451 million for fiscal years 2019, 2018 and 2017, respectively.

As of November 3, 2019 and November 4, 2018, we had $35 million and $22 million, respectively, of unpaid purchases of property, plant and equipment included in accounts payable and other current liabilities. Amounts reported as unpaid purchases are presented as cash outflows from investing activities for purchases of property, plant and equipment in the consolidated statements of cash flows in the period in which they are paid.

Other Current Assets

	November 3, 2019	November 4, 2018
	(In millions)	
Prepaid expenses	$ 302	$ 243
Other (miscellaneous)	427	123
Total other current assets	$ 729	$ 366

Other Current Liabilities

	November 3, 2019	November 4, 2018
	(In millions)	
Contract liabilities	$ 1,501	$ 164
Tax liabilities	229	162
Interest payable	214	165
Accrued rebates	95	161
Other (miscellaneous)	577	160
Total other current liabilities	$ 2,616	$ 812

Other Long-Term Liabilities

	November 3, 2019	November 4, 2018
	(In millions)	
Unrecognized tax benefits (a) (b)	$ 3,269	$ 3,088
Tax indemnification liability	116	116
Other (miscellaneous)	2,228	432
Total other long-term liabilities	$ 5,613	$ 3,636

(a) Refer to Note 11. “Income Taxes” for additional information regarding these balances.

(b) Includes accrued interest and penalties.

Other Income, Net

	Fiscal Year		
	2019	2018	2017
	(In millions)		
Gain (loss) on investment	$ 145	$ 3	$ (1)
Interest income	98	114	44
Other income	18	27	55
Other expense	(35)	—	(24)
Other income, net	$ 226	$ 144	$ 74

Other income includes gains (losses) on foreign currency remeasurement and other miscellaneous items.

6. Goodwill and Intangible Assets

Goodwill

	Wired Infrastructure	Wireless Communications	Enterprise Storage	Industrial & Other	Semiconductor Solutions	Infrastructure Software	IP Licensing	Total
	(In millions)							
Balance as of October 29, 2017	$ 17,622	$ 5,945	$ 995	$ 144	$ —	$ —	$ —	$ 24,706
Acquisitions	83	—	2,117	7	—	—	—	2,207
Balance as of November 4, 2018	17,705	5,945	3,112	151	—	—	—	26,913
Reallocation due to change in segments	(17,705)	(5,945)	(3,112)	(151)	25,924	980	9	—
Acquisitions	—	—	—	—	5	9,796	—	9,801
Balance as of November 3, 2019	$ —	$ —	$ —	$ —	$ 25,929	$ 10,776	$ 9	$ 36,714

During the first quarter of fiscal year 2019, we changed our organizational structure resulting in three reportable segments: semiconductor solutions, infrastructure software and IP licensing. As a result, we have reassigned the goodwill balance to reflect our new segment structure using a relative fair value allocation approach. Under this approach, the fair value of each segment was determined using a combination of the income approach and the market approach, and was compared to the fair value of the total business immediately prior to the reorganization to arrive at the reassigned goodwill balance.

During the fourth quarter of fiscal years 2019, 2018 and 2017, we completed our annual impairment assessments and concluded that goodwill was not impaired in any of these years.

Intangible Assets

	Gross Carrying Amount	Accumulated Amortization	Net Book Value
		(In millions)	
As of November 3, 2019:			
Purchased technology	$ 20,935	$ (10,113)	$ 10,822
Customer contracts and related relationships	5,978	(1,787)	4,191
Order backlog	2,569	(908)	1,661
Trade names	712	(247)	465
Other	241	(89)	152
Intangible assets subject to amortization	30,435	(13,144)	17,291
IPR&D	263	—	263
Total	$ 30,698	$ (13,144)	$ 17,554
As of November 4, 2018:			
Purchased technology	$ 15,806	$ (6,816)	$ 8,990
Customer contracts and related relationships	1,792	(878)	914
Trade names	578	(170)	408
Other	239	(53)	186
Intangible assets subject to amortization	18,415	(7,917)	10,498
IPR&D	264	—	264
Total	$ 18,679	$ (7,917)	$ 10,762

Based on the amount of intangible assets subject to amortization at November 3, 2019, the expected amortization expense for each of the next five fiscal years and thereafter was as follows:

Fiscal Year:	Expected Amortization Expense
	(In millions)
2020	$ 5,054
2021	4,151
2022	3,180
2023	2,172
2024	1,490
Thereafter	1,244
Total	$ 17,291

The weighted-average amortization periods remaining by intangible asset category were as follows:

Amortizable intangible assets:	November 3, 2019	November 4, 2018
	(In years)	
Purchased technology	5	6
Customer contracts and related relationships	5	5
Order backlog	3	N/A
Trade names	10	12
Other	10	10

Table of Contents

7. Net Income Per Share

	Fiscal Year		
	2019	2018	2017
	(In millions, except per share data)		
Numerator:			
Income from continuing operations	$ 2,736	$ 12,629	$ 1,790
Less: Dividends on preferred stock	29	—	—
Income from continuing operations attributable to noncontrolling interest	—	352	92
Income from continuing operations attributable to common stock	2,707	12,277	1,698
Loss from discontinued operations, net of income taxes	(12)	(19)	(6)
Less: Loss from discontinued operations, net of income taxes, attributable to noncontrolling interest	—	(1)	—
Loss from discontinued operations, net of income taxes, attributable to common stock	(12)	(18)	(6)
Net income attributable to common stock	$ 2,695	$ 12,259	$ 1,692
Denominator:			
Weighted-average shares outstanding - basic	398	418	405
Dilutive effect of equity awards	21	13	16
Weighted-average shares outstanding - diluted	419	431	421
Basic income per share attributable to common stock:			
Income per share from continuing operations	$ 6.80	$ 29.37	$ 4.19
Loss per share from discontinued operations	(0.03)	(0.04)	(0.01)
Net income per share	$ 6.77	$ 29.33	$ 4.18
Diluted income per share attributable to common stock:			
Income per share from continuing operations	$ 6.46	$ 28.48	$ 4.03
Loss per share from discontinued operations	(0.03)	(0.04)	(0.01)
Net income per share	$ 6.43	$ 28.44	$ 4.02
Potentially dilutive shares excluded from the calculation of diluted income per share because their effect would have been antidilutive:			
Preferred Stock (a)	1	—	—
LP Units (b)	—	9	22

(a) Represents common stock shares issuable upon the conversion of Mandatory Convertible Preferred Stock, as defined in Note 10. "Stockholders' Equity."

(b) Represents common stock shares issuable upon the exchange of LP Units prior to the effective time of the Mandatory Exchange (refer to Note 10. "Stockholders' Equity" for additional information).

8. Retirement Plans and Post-Retirement Benefits

Pension and Post-Retirement Benefit Plans

Defined Benefit Plans. The U.S. defined benefit pension plans include a management plan and a represented plan. Benefits under the management plan are provided under either an adjusted career-average-pay program or a cash-balance program. Benefits under the represented plan are based on a dollar-per-month formula. Benefit accruals under the management plan were frozen in 2009. Participants in the adjusted career-average-pay program no longer earn service accruals. Participants in the cash-balance program no longer earn service accruals, but continue to earn 4% interest per year on their cash-balance accounts. There are no active participants under the represented plan. We also have a non-qualified supplemental pension plan in the United States that principally provides benefits based on compensation in excess of amounts that can be considered under the management plan. Effective December 31, 2018, the represented plan was merged into the management plan. The plan merger did not impact any of the respective plan provisions for either management or represented plan participants. We also have pension plans covering certain non-U.S. employees.

Post-Retirement Benefit Plans. Certain of our U.S. employees who meet the retirement eligibility requirements as of their termination dates, may receive post-retirement medical benefits under our retiree medical account program. Eligible employees receive a medical benefit spending account of $55,000 upon retirement to pay premiums for medical coverage through the maximum age of 75 as retiree.

Our group life insurance plan offers post-retirement life insurance coverage for certain U.S. employees.

Non-U.S Retirement Benefit Plans. We have defined benefit plans for certain employees in Austria, France, Germany, India, Israel, Italy, Japan and Taiwan. Eligibility is generally determined based on the terms of our plans and local statutory requirements.

Net Periodic Benefit (Income) Cost

	Pension Benefits			Post-Retirement Benefits		
	Fiscal Year			Fiscal Year		
	2019	2018	2017	2019	2018	2017
	(In millions)					
Service cost	$ 10	$ 4	$ 4	$ —	$ —	$ —
Interest cost	58	51	53	3	3	3
Expected return on plan assets	(59)	(51)	(65)	(3)	(4)	(4)
Other	1	1	1	(1)	—	—
Net periodic benefit (income) cost	$ 10	$ 5	$ (7)	$ (1)	$ (1)	$ (1)
Net actuarial (gain) loss	$ 13	$ 14	$ (60)	$ 11	$ (3)	$ (3)

The components of net periodic benefit (income) costs other than the service cost are included in other income, net in our consolidated statements of operations.

Funded Status

	Pension Benefits		Post-Retirement Benefits	
	November 3, 2019	November 4, 2018	November 3, 2019	November 4, 2018
	(In millions)			
Change in plan assets:				
Fair value of plan assets — beginning of period	$ 1,394	$ 1,426	$ 81	$ 83
Actual return on plan assets	232	(65)	6	—
Employer contributions	15	130	1	—
Payments from plan assets	(94)	(93)	(3)	(2)
Foreign currency impact	(8)	(4)	—	—
Fair value of plan assets — end of period	1,539	1,394	85	81
Change in benefit obligations:				
Benefit obligations — beginning of period	1,364	1,508	74	80
Service cost	10	4	—	—
Interest cost	58	51	3	3
Actuarial (gain) loss	186	(102)	14	(7)
Benefit payments	(94)	(93)	(3)	(2)
Plan amendment	—	3	—	—
Benefit obligations assumed in an acquisition	37	—	5	—
Foreign currency impact	(8)	(7)	—	—
Benefit obligations — end of period	1,553	1,364	93	74
Overfunded (underfunded) status of benefit obligations (a)	$ (14)	$ 30	$ (8)	$ 7
Actuarial losses and prior service costs recognized in accumulated other comprehensive loss, net of taxes	$ (125)	$ (110)	$ (15)	$ (5)

(a) Substantially all amounts recognized in the consolidated balance sheets were recorded in other long-term assets and other long-term liabilities for all periods presented.

Plans with benefit obligations in excess of plan assets:

	Pension Benefits		Post-Retirement Benefits	
	November 3, 2019	November 4, 2018	November 3, 2019	November 4, 2018
	(In millions)			
Projected benefit obligations	$ 92	$ 551	$ —	$ —
Accumulated benefit obligations	$ 80	$ 546	$ 16	$ 14
Fair value of plan assets	$ 32	$ 528	$ —	$ —

Plans with benefit obligations less than plan assets:

	Pension Benefits		Post-Retirement Benefits	
	November 3, 2019	November 4, 2018	November 3, 2019	November 4, 2018
	(In millions)			
Projected benefit obligations	$ 1,461	$ 813	$ —	$ —
Accumulated benefit obligations	$ 1,460	$ 812	$ 77	$ 60
Fair value of plan assets	$ 1,507	$ 866	$ 85	$ 81

The fair value of pension plan assets at November 3, 2019 and November 4, 2018 included $151 million and $147 million, respectively, of assets for our non-U.S. pension plans.

The projected benefit obligations as of November 3, 2019 and November 4, 2018 included $184 million and $129 million, respectively, of obligations related to our non-U.S. plans. The accumulated benefit obligations as of November 3, 2019 and November 4, 2018 included $171 million and $122 million, respectively, of obligations related to our non-U.S. plans.

Expected Future Benefit Payments

Fiscal Years:	Pension Benefits	Post-Retirement Benefits
	(In millions)	
2020	$ 93	$ 6
2021	$ 92	$ 4
2022	$ 92	$ 4
2023	$ 92	$ 4
2024	$ 93	$ 4
2025-2029	$ 449	$ 23

Defined Benefit Plan Investment Policy

Plan assets of the funded defined benefit pension plans are invested in funds held by third-party fund managers or are deposited into government-managed accounts in which we have no active involvement in and no control over investment strategy, other than establishing broad investment guidelines and parameters.

Our plan's investment committee has set the investment strategy to fully match the liability. We direct the overall portfolio allocation and use a third-party investment consultant that has discretion to structure portfolios and select the investment managers within those allocation parameters. Multiple investment managers are utilized, including both active and passive management approaches. The plan assets are invested using the liability-driven investment strategy intended to minimize market and interest rate risks, and those assets are periodically rebalanced toward asset allocation targets.

The target asset allocation for U.S. plans reflects a risk/return profile that we believe is appropriate relative to the liability structure and return goals for the plans. We periodically review the allocation of plan assets relative to alternative allocation models to evaluate the need for adjustments based on forecasted liabilities and plan liquidity needs. For both fiscal years 2019 and 2018, 100% of U. S. plan assets were allocated to fixed income, in line with the target allocation. The fixed income allocation is primarily directed toward long-term core bond investments, with smaller allocations to Treasury Inflation-Protected Securities and high-yield bonds.

Fair Value Measurement of Plan Assets

	November 3, 2019										
	Fair Value Measurements at Reporting Date Using										
	Level 1			Level 2			Level 3		Total		
	(In millions)										
Cash equivalents	$	34	(a)	$	—		$	—	$	34	
Equity securities:											
Non-U.S. equity securities		21	(b)		—			—		21	
Fixed-income securities:											
U.S. treasuries		—			82	(c)		—		82	
Corporate bonds		—			1,372	(c)		—		1,372	
Municipal bonds		—			19	(c)		—		19	
Government bonds		—			10	(c)		—		10	
Asset-backed securities		—			1	(c)		—		1	
Total plan assets	$	55		$	1,484		$	—	$	1,539	

	November 4, 2018										
	Fair Value Measurements at Reporting Date Using										
	Level 1			Level 2			Level 3		Total		
	(In millions)										
Cash equivalents	$	36	(a)	$	—		$	—	$	36	
Equity securities:											
Non-U.S. equity securities		19	(b)		—			—		19	
Fixed-income securities:											
U.S. treasuries		—			80	(c)		—		80	
Corporate bonds		—			1,229	(c)		—		1,229	
Municipal bonds		—			17	(c)		—		17	
Government bonds		—			13	(c)		—		13	
Total plan assets	$	55		$	1,339		$	—	$	1,394	

____

(a) Cash equivalents primarily included short-term investment funds which consisted of short-term money market instruments that were valued based on quoted prices in active markets.

(b) These equity securities were valued based on quoted prices in active markets.

(c) These amounts consisted of investments that were traded less frequently than Level 1 securities and were valued using inputs that included quoted prices for similar assets in active markets and inputs other than quoted prices that were observable for the asset, such as interest rates, yield curves, prepayment speeds, collateral performance, broker/dealer quotes and indices that were observable at commonly quoted intervals.

Post-Retirement Benefit Plan Investment Policy

Our overall investment strategy for the group life insurance plan is to allocate assets in a manner that seeks to both maximize the safety of promised benefits and minimize the cost of funding those benefits. The target asset allocation for plan assets reflects a risk/return profile that we believe is appropriate relative to the liability structure and return goals for the plan. We periodically review the allocation of plan assets relative to alternative allocation models to evaluate the need for adjustments based on forecasted liabilities and plan liquidity needs. We set the overall portfolio allocation and use an investment manager that directs the investment of funds consistent with that allocation. The investment manager invests the plan assets in index funds that it manages. For both fiscal years 2019 and 2018, 100% of plan assets were allocated to commingled funds that invested in fixed income, in line with the target allocation.

Assumptions

The assumptions used to determine the benefit obligations and net periodic benefit (income) cost from our defined benefit and post-retirement benefit plans are presented in the table below. The expected long-term return on assets shown in the table below represents an estimate of long-term returns on investment portfolios primarily consisting of combinations of debt, equity and other investments, depending on the plan. The long-term rates of return are then weighted based on the asset classes (both historical and forecasted) in which we expect the pension and post-retirement funds to be invested. Discount rates reflect the current rate at which defined benefit and post-retirement benefit obligations could be settled based on the measurement dates of the plans, which in each case is our fiscal year end. The range of assumptions that are used for defined benefit pension plans reflects the different economic environments within various countries.

	Assumptions for Benefit Obligations as of		Assumptions for Net Periodic Benefit (Income) Cost Fiscal Year		
	November 3, 2019	November 4, 2018	2019	2018	2017
Defined benefit pension plans:					
Discount rate	0.47%-7.00%	0.50%-8.00%	0.50%-8.00%	0.50%-7.00%	0.50%-7.00%
Average increase in compensation levels	2.00%-10.00%	2.00%-10.00%	1.80%-10.00%	2.00%-11.00%	2.00%-9.15%
Expected long-term return on assets	N/A	N/A	1.50%-7.75%	1.50%-7.50%	0.25%-8.00%

	Assumptions for Benefit Obligations as of		Assumptions for Net Periodic Benefit (Income) Cost Fiscal Year		
	November 3, 2019	November 4, 2018	2019	2018	2017
Post-retirement benefits plans:					
Discount rate	2.80%-3.20%	4.30%-4.60%	4.12%-4.60%	3.40%-3.80%	3.30%-3.90%
Average increase in compensation levels	3.00%	3.00%	3.00%	3.00%	3.50%
Expected long-term return on assets	N/A	N/A	4.80%	4.80%	4.40%

	Assumed Health Care Cost Trend Rate Used to Measure the Expected Cost of Benefits as of	
	November 3, 2019	November 4, 2018
Health care cost trend rate assumed for next year	4.50%-7.40%	6.70%
Rate to which the health care cost trend rate is assumed to decline (ultimate health care cost trend rate)	3.50%-4.50%	3.50%
Year that the rate reaches the ultimate health care cost trend rate	2031	2031

A one percentage point increase or decrease in the assumed health care cost trend rates would not have had a material effect on the accumulated post-retirement benefit obligations or service and interest cost components of the net periodic benefit cost for any periods presented.

Defined Contribution Plans

Our eligible U.S. employees participate in company-sponsored 401(k) plans. Under these plans, we provide matching contributions to employees up to 6% of their eligible earnings. All matching contributions vest immediately. During fiscal years 2019, 2018 and 2017, we made contributions of $89 million, $73 million and $61 million, respectively, to the 401(k) plans.

In addition, other eligible employees outside of the U.S. receive retirement benefits under various defined contribution retirement plans.

Table of Contents

9. Borrowings

	Effective Interest Rate	November 3, 2019	November 4, 2018
		(In millions)	
2019 Senior Notes - fixed rate			
3.125% notes due April 2021	3.607%	$ 2,000	$ —
3.125% notes due October 2022	3.527%	1,500	—
3.625% notes due October 2024	3.980%	2,000	—
4.250% notes due April 2026	4.544%	2,500	—
4.750% notes due April 2029	4.953%	3,000	—
		11,000	—
2019 Term Loans - floating rate			
LIBOR plus 1.250% term loan due through May 2024	3.362%	800	—
LIBOR plus 1.375% term loan due through May 2026	3.452%	800	—
		1,600	—
2017 Senior Notes - fixed rate			
2.375% notes due January 2020	2.615%	2,750	2,750
2.200% notes due January 2021	2.406%	750	750
3.000% notes due January 2022	3.214%	3,500	3,500
2.650% notes due January 2023	2.781%	1,000	1,000
3.625% notes due January 2024	3.744%	2,500	2,500
3.125% notes due January 2025	3.234%	1,000	1,000
3.875% notes due January 2027	4.018%	4,800	4,800
3.500% notes due January 2028	3.596%	1,250	1,250
		17,550	17,550
Assumed CA Senior Notes - fixed rate			
5.375% notes due December 2019	3.433%	750	—
3.600% notes due August 2022	4.071%	500	—
4.500% notes due August 2023	4.099%	250	—
4.700% notes due March 2027	5.153%	350	—
		1,850	—
Commercial Paper			
Commercial paper	2.547% (a)	1,000	—
		1,000	—
Assumed Brocade Convertible Notes - fixed rate			
1.375% convertible notes due January 2020	0.628%	37	37
		37	37
Assumed BRCM Senior Notes - fixed rate			
2.500% - 4.500% notes due August 2022 - August 2034	2.585% - 4.546%	22	22
Total principal amount outstanding		33,059	17,609
Less: Unaccreted discount/premium and unamortized debt issuance costs		(261)	(116)
Total debt		$ 32,798	$ 17,493

(a) Represents the weighted average interest rate on outstanding commercial paper as of November 3, 2019.

2019 Senior Notes

In April 2019, we issued $11 billion in aggregate principal amount of senior unsecured notes ("2019 Senior Notes"). The 2019 Senior Notes are fully and unconditionally guaranteed, jointly and severally, on an unsecured, unsubordinated basis by Broadcom Corporation ("BRCM") and Broadcom Technologies Inc. ("BTI"). Each series of our 2019 Senior Notes pays interest semi-annually in arrears on April 15 and October 15 of each year. We may, at our option, redeem or purchase, in whole or in part, any of the 2019 Senior Notes at a price equal to 100% of the principal amount of the applicable 2019 Senior Notes, plus a corresponding make-whole premium as set forth in the indenture governing the 2019 Senior Notes, plus accrued and unpaid interest, if any, to the date of repurchase. The 2019 Senior Notes are recorded as long-term debt, net of discount. The discount associated with the 2019 Senior Notes is amortized to interest expense over the respective terms of these borrowings.

2019 Term Loans

On November 5, 2018, in connection with the CA Merger, we entered into a credit agreement (the "Original 2019 Credit Agreement"), which provided for a $9 billion unsecured term A-3 facility and a $9 billion unsecured term A-5 facility, collectively referred to as the "Original 2019 Term Loans". Interest on our Original 2019 Term Loans was based on a floating rate and was payable monthly. Our obligations under the Original 2019 Credit Agreement were guaranteed on an unsecured basis by BRCM, Broadcom Cayman Finance Limited ("Cayman Finance") and BTI. The Original 2019 Credit Agreement also provided for a five-year $5 billion unsecured revolving credit facility. In April 2019, we used the net proceeds of $11 billion from the 2019 Senior Notes and net proceeds of $1 billion from Commercial Paper (defined below) to reduce the outstanding amount of our Original 2019 Term Loans from $18 billion to $6 billion. As a result of repaying the Original 2019 Term Loans, we wrote off $26 million of debt issuance costs, which were included in interest expense in the consolidated statements of operations. The remaining unamortized discount and debt issuance costs balance on the Original 2019 Term Loans will be amortized to interest expense over the respective terms of the 2019 Senior Notes and Commercial Paper.

In May 2019, we entered into a new credit agreement (the "2019 Credit Agreement"), which provides for a $2 billion unsecured term A-3 facility, a $2 billion unsecured term A-5 facility and a $2 billion unsecured term A-7 facility, collectively referred to as the "2019 Term Loans". The 2019 Credit Agreement has substantially the same terms and conditions as the Original 2019 Credit Agreement, except for the maturity dates of the facilities. The 2019 Term Loans replaced the remaining $6 billion Original 2019 Term Loans, which were terminated in connection with, and as a condition to, entering into the 2019 Credit Agreement. Our obligations under the 2019 Credit Agreement are guaranteed on an unsecured basis by BRCM, Cayman Finance and BTI.

In October 2019, we fully repaid our unsecured term A-3 facility of $2 billion and repaid $1.2 billion of each of our unsecured term A-5 and A-7 facilities under the 2019 Credit Agreement, using net proceeds from our Mandatory Convertible Preferred Stock offering as defined in Note 10. "Stockholders' Equity," as well as with cash on hand. As a result, we wrote off $22 million of debt issuance costs and unamortized discounts, which were included in interest expense in the consolidated statements of operations.

Revolving Facility

The 2019 Credit Agreement also provided for a five-year $5 billion unsecured revolving credit facility (the "Revolving Facility"), of which $500 million was available for the issuance of multi-currency letters of credit. The Revolving Facility replaced the revolving credit facility of the same amount under the Original 2019 Credit Agreement. The issuance of letters of credit and certain other instruments would reduce the aggregate amount otherwise available under the Revolving Facility for revolving loans. Subject to the terms of the 2019 Credit Agreement, we are permitted to borrow, repay and reborrow revolving loans at any time prior to the earlier of (a) November 2023 or (b) the date of termination in whole of the revolving lenders' commitments under the 2019 Credit Agreement in accordance with the terms thereof. We had no borrowings outstanding under the Revolving Facility on November 3, 2019.

Commercial Paper

In February 2019, we established a commercial paper program pursuant to which we may issue unsecured commercial paper notes ("Commercial Paper") in an aggregate principal amount of up to $2 billion outstanding at any time with maturities of up to 397 days from the date of issue. Commercial Paper is sold under customary terms in the commercial paper market and may be issued at a discount from par or, alternatively, may be sold at par and bear interest at rates dictated by market conditions at the time of their issuance. The Revolving Facility supports our commercial paper program. Outstanding Commercial Paper borrowings reduce the amount that would otherwise be available to borrow for general corporate purposes under the Revolving Facility. As of November 3, 2019, we had $1 billion of Commercial Paper outstanding with maturities generally less than sixty days. We intend to continuously replace our Commercial Paper upon maturity with newly issued commercial paper. In addition, we have the ability to finance the Commercial Paper borrowings on a long-term basis as they are supported by the Revolving Facility. We have recorded Commercial Paper, net of discount, as long-term debt. The discount associated with the Commercial Paper is amortized to interest expense over its term.

2017 Senior Notes

During fiscal year 2017, BRCM and Broadcom Cayman Finance Limited, or together with BRCM referred to as the "Subsidiary Issuers", issued of $17,550 million senior unsecured notes (the "2017 Senior Notes"). Our 2017 Senior Notes were fully and unconditionally guaranteed, jointly and severally, on an unsecured, unsubordinated basis by Broadcom-Singapore and the Partnership, subject to certain release conditions described in the indenture governing the 2017 Senior Notes (the "2017 Indentures"). On April 9, 2018, Broadcom ("Parent Guarantor") became a guarantor of the 2017 Senior Notes and entered into supplemental indentures with the Subsidiary Issuers and the trustee of the 2017 Senior Notes. At that time, Broadcom-Singapore, a guarantor at the issuance of the 2017 Senior Notes, became an indirect wholly-owned subsidiary of Broadcom and a subsidiary guarantor ("Subsidiary Guarantor"), together with Parent Guarantor referred to as the "Guarantors". In addition, the Partnership was released from its guarantee of the 2017 Senior Notes under each of the 2017 Indentures in accordance with their terms. Each series of 2017 Senior Notes pays interest semi-annually in cash in arrears on January 15 and July 15 of each year.

We may redeem all or a portion of our 2017 Senior Notes at any time prior to their maturity, subject to a specified make whole premium as set forth in the 2017 Indentures. In the event of a change of control triggering event, holders of our 2017 Senior Notes will have the right to require us to purchase for cash, all or a portion of their 2017 Senior Notes at a redemption price of 101% of the aggregate principal amount plus accrued and unpaid interest.

During fiscal year 2018, substantially all of the 2017 Senior Notes were tendered and exchanged for notes registered with the U.S. Securities and Exchange Commission ("SEC"), with substantially identical terms.

Assumed CA Senior Notes

In connection with the CA Merger, we assumed $2.25 billion in aggregate principal amount of CA's outstanding senior unsecured notes (the "Assumed CA Senior Notes"). CA remains the sole obligor under the Assumed CA Senior Notes. We may redeem all or a portion of the Assumed CA Senior Notes at any time, subject to a specified make-whole premium as set forth in the related indenture. In the event of a change in control, each note holder will have the right to require us to repurchase all or any part of the holder's notes in cash at a price equal to 101% of the principal amount of such notes plus accrued and unpaid interest, if any, to the date of repurchase (subject to the right of holders of record on the relevant interest payment date to receive interest due). Each series of the Assumed CA Senior Notes pays interest semi-annually.

In October 2019, we fully repaid our 3.600% notes due August 2020 of $400 million. As a result of this payoff, we wrote off $1 million of unamortized premium and incurred a make-whole premium of $5 million, which were included in interest expense in the consolidated statements of operations.

Assumed Brocade Debt

As a result of the Brocade Merger, we assumed $575 million in aggregate principal amount of Brocade's 1.375% convertible senior unsecured notes due 2020, or the Assumed Brocade Convertible Notes. The Brocade Merger was a "fundamental change" as well as a "make-whole fundamental change" as defined under the terms of the indenture governing the Assumed Brocade Convertible Notes. Accordingly, the holders of the Assumed Brocade Convertible Notes received the right to require us to repurchase their notes for cash. During fiscal year 2018, we repurchased $537 million in aggregate principal amount for $548 million at a conversion rate of $1,018 for each $1,000 of principal surrendered for conversion. The remaining outstanding Assumed Brocade Convertible Notes are convertible into cash at a conversion rate of $812 for each $1,000 of principal.

We also assumed $300 million of Brocade's 4.625% senior unsecured notes due 2023. In January 2018, we redeemed all of these outstanding notes for a total payment of $308 million.

Fair Value of Debt

As of November 3, 2019, the estimated aggregate fair value of our debt was $33,652 million. The fair value of our senior notes was determined using quoted prices from less active markets. The estimated fair value of our 2019 Term Loans approximated their carrying value due to their floating interest rates and consistency in our credit ratings. The estimated fair value of our Commercial Paper approximated its carrying value due to the short-term nature of these borrowings. All of our debt obligations are categorized as Level 2 instruments.

Future Principal Payments of Debt

The future scheduled principal payments of debt as of November 3, 2019 were as follows:

Fiscal Year:	**Future Scheduled Principal Payments**
	(In millions)
2020	$ 4,537
2021	2,750
2022	5,509
2023	1,250
2024	5,307
Thereafter	13,706
Total	$ 33,059

As of November 3, 2019 and November 4, 2018, we accrued interest payable of $214 million and $165 million, respectively, and were in compliance with all debt covenants.

10. Stockholders' Equity

Mandatory Convertible Preferred Stock Offering

On September 30, 2019, we completed an offering of approximately 4 million shares of 8.00% Mandatory Convertible Preferred Stock, Series A, $0.001 par value per share (the "Mandatory Convertible Preferred Stock"), including certain additional shares sold pursuant to the underwriters' option, which generated net proceeds of approximately $3,679 million. We used the net proceeds of this offering to repay a portion of the outstanding borrowings under our existing term loan facilities.

The holders of Mandatory Convertible Preferred Stock are entitled to receive, when, as and if declared by our Board of Directors, or an authorized committee thereof, out of funds legally available for payment, cumulative dividends at the annual rate of 8.00% of the liquidation preference of $1,000 per share (equivalent to $80 annually per share), payable in cash or, subject to certain limitations, by delivery of shares of our common stock or any combination of cash and shares of our common stock, at our election; provided, however, that any undeclared and unpaid dividends will continue to accumulate.

Subject to limited exceptions, no dividends may be declared or paid on shares of our common stock, unless all accumulated dividends have been paid or set aside for payment on all outstanding shares of our Mandatory Convertible Preferred Stock for all past completed dividend periods. In the event of our voluntary or involuntary liquidation, dissolution or winding-up, no distribution of our assets may be made to holders of our common stock until we have paid to holders of our Mandatory Convertible Preferred Stock a liquidation preference equal to $1,000 per share plus accumulated and unpaid dividends.

Unless earlier converted, each outstanding share of Mandatory Convertible Preferred Stock will automatically convert on the mandatory conversion date, which is expected to be September 30, 2022, into between 3.0303 and 3.5422 shares of our common stock, depending on the applicable market value of our common stock upon conversion and subject to customary anti-dilution adjustments. At any time prior to September 30, 2022, holders may elect to convert each share of Mandatory Convertible Preferred Stock into shares of our common stock at the minimum conversion rate of 3.0303, subject to anti-dilution adjustments and certain exceptions.

The Mandatory Convertible Preferred Stock will not be redeemable at our election before the mandatory conversion date. The holders of the Mandatory Convertible Preferred Stock will not have any voting rights, with limited exceptions.

During the fourth quarter of fiscal year 2019, we recognized $29 million of earned preferred stock dividends and presented it as temporary equity in our consolidated balance sheet as of November 3, 2019.

Redomiciliation Transaction

For the period prior to the Redomiciliation Transaction, our stockholders' equity reflected Broadcom-Singapore's outstanding ordinary shares. On April 4, 2018, all Broadcom-Singapore outstanding ordinary shares were exchanged on a one-for-one basis for newly issued shares of Broadcom common stock and Broadcom-Singapore became a wholly-owned subsidiary of Broadcom.

In conjunction with the Redomiciliation Transaction and pursuant to the Mandatory Exchange, all outstanding LP Units held by the limited partners were mandatorily exchanged for approximately 22 million newly issued shares of Broadcom common stock on a one-for-one basis. As a result, all limited partners of the Partnership became common stockholders of Broadcom. In addition, all related outstanding special preference shares of Broadcom-Singapore were automatically redeemed upon the Mandatory Exchange.

Noncontrolling Interest

Immediately prior to the Redomiciliation Transaction, the limited partners held a noncontrolling interest of approximately 5% in the Partnership through their ownership of LP Units. Accordingly, net income attributable to our common stock in our consolidated statements of operations excluded the noncontrolling interest's proportionate share of our results prior to the Redomiciliation Transaction. In addition, we presented the proportionate share of equity attributable to the noncontrolling interest as a separate component of total equity within our consolidated statements of equity for the periods prior to the Redomiciliation Transaction.

Dividends and Distributions

	Fiscal Year		
	2019	**2018**	**2017**
	(In millions, except per share data)		
Cash dividends and distributions declared and paid per share/unit	$ 10.60	$ 7.00	$ 4.08
Cash dividends declared and paid to common stockholders	$ 4,235	$ 2,921	$ 1,653
Cash distributions declared and paid to limited partners	$ —	$ 77	$ 92

Stock Repurchase Program

Pursuant to an $18 billion stock repurchase program authorized by our Board of Directors, we repurchased and retired approximately 21 million and 32 million shares of our common stock for $5,435 million and $7,258 million during fiscal years 2019 and 2018, respectively. This authorization ended on November 3, 2019.

Equity Incentive Award Plans

Stock-based incentive awards are provided to employees and directors under the terms of various Broadcom equity incentive plans.

2009 Plan

In July 2009, our Board of Directors adopted, and our stockholders approved, the Avago Technologies Limited 2009 Equity Incentive Award Plan (the "2009 Plan") to authorize the grant of options, stock appreciation rights, RSUs, dividend equivalents, performance awards, and other stock-based awards. A total of 20 million shares of common stock were initially reserved for issuance under the 2009 Plan, subject to annual increases starting in fiscal year 2012. The amount of the annual increase was equal to the least of (a) 6 million shares, (b) 3% of the common stock outstanding on the last day of the immediately preceding fiscal year and (c) such smaller number of common stock as determined by our Board. However, no more than 90 million shares of common stock may be issued upon the exercise of equity awards issued under the 2009 Plan. The 2009 Plan became effective on July 27, 2009.

Options issued to employees under the 2009 Plan prior to March 2011 generally expire ten years following the date of grant. Since March 2011, options issued to employees under the 2009 Plan generally expire seven years after the date of grant. Options awarded to non-employees under this plan generally expire after five years. Options issued to both employees and non-employees under the 2009 Plan generally vested over a period of four years from the date of grant and were granted with an exercise price equal to the fair market value on the date of grant. Any stock options cancelled or forfeited after July 27, 2009 under the equity incentive plans adopted prior to the 2009 Plan became available for issuance under the 2009 Plan. RSU awards granted to employees under the 2009 Plan generally vest annually over four years.

The 2009 Plan expired in July 2019.

2003 Plan

In connection with the acquisition of LSI Corporation ("LSI"), we assumed the LSI 2003 Equity Incentive Plan (the "2003 Plan") and outstanding unvested stock options and RSUs originally granted by LSI under the 2003 Plan that were held by continuing employees. Under the 2003 Plan, we may grant to former employees of LSI and other employees who were not employees of Broadcom at the time of the acquisition restricted stock awards, RSUs, stock options and stock appreciation rights with an exercise price that is no less than the fair market value on the date of grant. No participant may be granted stock options covering more than 4 million shares or more than an aggregate of 1 million shares of restricted stock and RSUs in any fiscal year. Equity awards granted under the 2003 Plan following the LSI acquisition are expected to be on similar terms and consistent with similar grants made pursuant to the 2009 Plan. As of November 3, 2019, 3 million shares remained available for issuance under the 2003 Plan.

2012 Plan

In connection with the acquisition of BRCM, we assumed the BRCM 2012 Stock Incentive Plan (the "2012 Plan") and outstanding unvested RSUs originally granted by BRCM under the 2012 Plan that were held by continuing employees. Under the 2012 Plan, we may grant to former employees of BRCM and other employees who were not employees of Broadcom at the time of the acquisition restricted stock awards, RSUs, stock options and stock appreciation rights with an exercise price that is no less than the fair market value on the date of grant. No participant may be granted stock options, restricted stock or RSUs, covering more than an aggregate of 4 million shares in any fiscal year. Equity awards granted under the 2012 Plan following the acquisition of BRCM are on similar terms and consistent with similar grants made pursuant to the 2009 Plan. As of November 3, 2019, 82 million shares remained available for issuance under the 2012 Plan. The number of shares available for issuance under the 2012 Plan is subject to an annual increase of 12 million shares.

We also grant market-based RSUs with both a service condition and a market condition as part of our equity compensation programs. The market-based RSUs generally vest over four years, subject to satisfaction of market conditions. During fiscal years 2019, 2018 and 2017, we granted market-based RSUs under which grantees may receive the number of shares ranging from 0% to 450% of the original grant at vesting based upon the total stockholder return ("TSR") on our common stock as compared to the TSR of an index group of companies.

Amendment to the RSU Vesting Schedule

During fiscal year 2019, the Compensation Committee of our Board of Directors approved an amendment to the vesting of time-based RSUs (other than those assumed in an acquisition), held by approximately 16,500 employees below the vice president level, from an annual vesting cycle to a quarterly vesting cycle.

Employee Stock Purchase Plan

The ESPP provides eligible employees with the opportunity to acquire an ownership interest in us through periodic payroll deductions, based on a 6-month look-back period, at a price equal to the lesser of 85% of the fair market value of our common stock at either the beginning or ending of the relevant offering period. The ESPP is structured as a qualified employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986. However, the ESPP is not intended to be a qualified pension, profit sharing or stock bonus plan under Section 401(a) of the Internal Revenue Code of 1986 and is not subject to the provisions of Employee Retirement Income Security Act of 1974.

Stock-Based Compensation Expense

	Fiscal Year		
	2019	2018	2017
		(In millions)	
Cost of products sold	$ 120	$ 77	$ 64
Cost of subscriptions and services	43	9	—
Research and development	1,532	855	636
Selling, general and administrative	490	286	220
Total stock-based compensation expense (a)	$ 2,185	$ 1,227	$ 920
Estimated income tax benefits for stock-based compensation	$ 400	$ 195	$ 249
Income tax benefits for stock-based awards exercised or released	$ 232	$ 181	$ 273

(a) Does not include stock-based compensation related to discontinued operations recognized during fiscal year 2017, which was included in loss from discontinued operations, net of income taxes in our consolidated statements of operations.

We have assumed an annualized forfeiture rate for RSUs of 5%. We will recognize additional expense if actual forfeitures are lower than we estimated, and will recognize a benefit if actual forfeitures are higher than we estimated.

During the first quarter of fiscal year 2019, the Compensation Committee of our Board of Directors approved a broad-based program of multi-year equity grants of time- and market-based RSUs (the "Multi-Year Equity Awards") in lieu of our annual employee equity awards historically granted on March 15 of each year. Each Multi-Year Equity Award vests on the same basis as four annual grants made March 15 of each year, beginning in fiscal year 2019, with successive four-year vesting periods. Stock-based compensation expense related to the Multi-Year Equity Awards was $890 million for fiscal year 2019, including $133 million of Multi-Year Equity Awards granted to employees acquired in the CA Merger.

In connection with the amendment to the vesting of certain time-based RSUs from an annual cycle to a quarterly cycle, we recognized approximately $140 million in incremental compensation cost during fiscal year 2019.

For fiscal year 2019, stock-based compensation expense included $83 million related to equity awards assumed in connection with the CA Merger. In addition to stock-based compensation expense presented above, in fiscal year 2019, we recognized $75 million in restructuring charges for accelerated vesting of assumed equity awards held by employees terminated in connection with the CA Merger.

As of November 3, 2019, the total unrecognized compensation cost related to unvested stock-based awards was $5,641 million, which is expected to be recognized over the remaining weighted-average service period of 4.1 years.

The following table summarizes the weighted-average assumptions utilized to calculate the fair value of market-based awards granted in the periods presented:

	Market-Based Awards		
	Fiscal Year		
	2019	2018	2017
Risk-free interest rate	2.7%	2.4%	1.7%
Dividend yield	4.4%	2.6%	1.8%
Volatility	33.0%	32.5%	32.3%
Expected term (in years)	4.0	4.0	4.0

The risk-free interest rate was derived from the average U.S. Treasury Strips rate, which approximated the rate in effect appropriate for the term at the time of grant.

The dividend yield was based on the historical and expected dividend payouts as of the respective award grant dates.

The volatility was based on our own historical stock price volatility over the period commensurate with the expected life of the awards and the implied volatility of a 180-day call option on our own common stock measured at a specific date.

The expected term was commensurate with the awards' contractual terms.

Restricted Stock Unit Awards

A summary of time- and market-based RSU activity is as follows:

	Number of RSUs Outstanding	Weighted-Average Grant Date Fair Value Per Share
	(In millions, except per share data)	
Balance as of October 30, 2016	17	$ 130.71
Granted	8	$ 199.33
Vested	(5)	$ 126.81
Forfeited	(2)	$ 142.78
Balance as of October 29, 2017	18	$ 163.42
Granted	7	$ 239.48
Vested	(6)	$ 155.78
Forfeited	(1)	$ 175.46
Balance as of November 4, 2018	18	$ 195.50
Assumed in CA Merger	1	$ 206.14
Granted	33	$ 183.64
Vested	(10)	$ 192.28
Forfeited	(2)	$ 182.80
Balance as of November 3, 2019	40	$ 188.52

The aggregate fair value of time- and market-based RSUs that vested in fiscal years 2019, 2018 and 2017 was $2,958 million, $1,516 million and $1,172 million, respectively, which represents the market value of our common stock on the date that the RSUs vested. The number of RSUs vested included shares of common stock that we withheld for settlement of employees' tax obligations due upon the vesting of RSUs.

Stock Option Awards

A summary of time- and market-based stock option activity is as follows:

	Number of Options Outstanding	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Life (In years)	Aggregate Intrinsic Value
	(In millions, except years and per share data)			
Balance as of October 30, 2016	15	$ 48.77		
Exercised	(4)	$ 45.48		$ 682
Cancelled	(1)	$ 66.08		
Balance as of October 29, 2017	10	$ 49.54		
Exercised	(2)	$ 47.41		$ 534
Cancelled	— *	$ 72.37		
Balance as of November 4, 2018	8	$ 50.14		
Exercised	(4)	$ 47.88		$ 761
Cancelled	— *	$ 49.00		
Balance as of November 3, 2019	4	$ 51.83	1.11	$ 1,077
Fully vested as of November 3, 2019	4	$ 51.83	1.11	$ 1,077

* Represents fewer than 0.5 million shares.

11. Income Taxes

Components of Income from Continuing Operations Before Income Taxes

As a result of the Redomiciliation Transaction on April 4, 2018, the following references to domestic activities represent the U.S. for fiscal years 2019 and 2018 and Singapore for fiscal year 2017. The following table presents the components of income from continuing operations before income taxes for financial reporting purposes:

	Fiscal Year		
	2019	2018	2017
	(In millions)		
Domestic income (loss)	$ (4,116)	$ (705)	$ 2,102
Foreign income (loss)	6,342	5,250	(277)
Income from continuing operations before income taxes	$ 2,226	$ 4,545	$ 1,825

Components of Provision for (Benefit from) Income Taxes

The benefit from income taxes in fiscal year 2019 was primarily due to $232 million of excess tax benefits from stock-based awards that vested or were exercised during the period, $131 million from the recognition of gross unrecognized tax benefits as a result of audit settlements and lapses of statutes of limitations net of increases in balances related to tax positions taken during the current year, $80 million of benefit from deferred tax remeasurement in state and foreign jurisdictions, $66 million of benefit related to internal reorganizations, and $54 million of benefit from the partial release of our valuation allowance as a result of the CA Merger, partly offset by $113 million of expense from a change in estimate of our fiscal year 2018 benefit as a result of proposed U.S. Treasury regulations issued in fiscal year 2019 related to the 2017 Tax Reform Act.

The 2017 Tax Reform Act made significant changes to the U.S. Internal Revenue Code, including, but not limited to, a decrease in the U.S. corporate tax rate from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a participation exemption regime, and the transition tax on the mandatory deemed repatriation of accumulated non-U.S. earnings of U.S. controlled foreign corporations. Several provisions of the 2017 Tax Reform Act became effective for us for the first time in fiscal year 2019, including a new minimum tax on certain foreign earnings, known as Global Intangible Low-taxed Income ("GILTI"), a new incentive for foreign-derived intangible income, changes to the limitation on the deductibility of certain executive compensation, and new limitations on the deductibility of interest expense. We have elected to account for GILTI as a period cost rather than on a deferred basis.

On December 22, 2017, the SEC issued Staff Accounting Bulletin No. 118. This guidance allowed registrants a "measurement period," not to exceed one year from the date of enactment, to complete their accounting for the tax effects of the 2017 Tax Reform Act. We relied on this guidance to refine our estimates of the impact of the 2017 Tax Reform Act during the measurement period. The measurement period ended during our fiscal quarter ended February 3, 2019, and no adjustments were recorded. As a result, we consider our accounting for the tax effects of the 2017 Tax Reform Act to be complete based on our interpretation of the law and subsequently issued guidance. However, it is expected that the U.S. Treasury will continue to issue regulations and other guidance on the application of certain provisions of the 2017 Tax Reform Act that may impact our interpretation of the rules and our calculation of the tax impact of the transition tax on the mandatory deemed repatriation of accumulated non-U.S. earnings of U.S. controlled foreign corporations as of December 31, 2017 or other provisions of the 2017 Tax Reform Act.

In connection with the CA Merger in November 2018, we established $2,434 million of net deferred tax liabilities on the excess of the book basis over the tax basis of acquired identified intangible assets and investments in certain foreign subsidiaries that had not been indefinitely reinvested, partially offset by acquired tax attributes.

The benefit from income taxes in fiscal year 2018 was primarily due to income tax benefits recognized from the enactment of the 2017 Tax Reform Act and the Redomiciliation Transaction. As a result of the 2017 Tax Reform Act, we recorded a total provisional benefit of $7,278 million in fiscal year 2018. This provisional benefit included $7,212 million related to the Transition Tax, which was primarily due to a reduction of $10,457 million in our federal deferred income tax liabilities on accumulated non-U.S. earnings, partially offset by $2,133 million of federal provisional long-term Transaction Tax payable and $1,112 million of unrecognized federal tax benefits related to the Transition Tax. The provisional benefit also included $66 million related to the remeasurement of certain deferred tax assets and liabilities, which were based on the tax rates at which they were expected to be reversed in the future as a result of the 2017 Tax Reform Act.

The impact of the Redomiciliation Transaction and the related internal reorganizations included tax benefits of $1,162 million in fiscal year 2018 from the remeasurement of withholding taxes on undistributed earnings, partially offset by a $167 million tax provision on foreign earnings and profits subject to U.S. tax.

The income tax provision for fiscal year 2017 was primarily due to profit before tax and a discrete expense of $76 million resulting from entity reorganizations partially offset by the recognition of $273 million of excess tax benefits from stock-based awards that vested or were exercised during fiscal year 2017 and, to a lesser extent, the recognition of previously unrecognized tax benefits primarily as a result of audit settlements.

We have obtained several tax incentives from the Singapore Economic Development Board, an agency of the Government of Singapore, which provide that qualifying income earned in Singapore is subject to tax incentives or reduced rates of Singapore income tax. Each tax incentive was separate and distinct from the others, and may be granted, withheld, extended, modified, truncated, complied with or terminated independently without any effect on the other incentives. Subject to our compliance with the conditions specified in these incentives and legislative developments, the Singapore tax incentive is presently expected to expire in November 2025.

We have also obtained a tax holiday on our qualifying income in Malaysia, which is scheduled to expire in fiscal year 2028. The tax holiday that we negotiated in Malaysia is also subject to our compliance with various operating and other conditions. If we cannot, or elect not to, comply with the conditions specified, we will lose the related tax benefits and we could be required to refund previously realized material tax benefits.

Before taking into consideration the effects of the 2017 Tax Reform Act and other indirect tax impact, the effect of these tax incentives and tax holiday was to increase the benefit from income taxes by approximately $923 million and $590 million and increase diluted net income per share by $2.20 and $1.37 for fiscal years 2019 and 2018, respectively. For fiscal year 2017, the effect of these tax incentives and tax holiday was to reduce the overall provision for income taxes by approximately $237 million and reduce diluted net loss per share by $0.56.

During fiscal year 2019, we reevaluated our indefinite reinvestment assertion with regards to certain accumulated foreign earnings and concluded that we intend to indefinitely reinvest $2,677 million of such earnings as a result of interpretive guidance issued by the IRS. The amount of unrecognized deferred income tax liability indefinitely related to these earnings is estimated to be $281 million. All other current and future earnings of all our foreign subsidiaries are not considered permanently reinvested.

As a result of the Redomiciliation Transaction on April 4, 2018, the following references to current tax expense (benefit from) federal and state represent the U.S. for fiscal years 2019 and 2018 and Singapore for fiscal year 2017. Significant components of the provision for (benefit from) income taxes are as follows:

	Fiscal Year		
	2019	2018	2017
		(In millions)	
Current tax expense (benefit from):			
Federal	$ (49)	$ 255	$ 112
State	(16)	38	—
Foreign	342	171	158
	277	464	270
Deferred tax expense (benefit from):			
Federal	(497)	(8,666)	(1)
State	(113)	(103)	—
Foreign	(177)	221	(234)
	(787)	(8,548)	(235)
Total provision for (benefit from) income taxes	$ (510)	$ (8,084)	$ 35

Rate Reconciliation

	Fiscal Year		
	2019	2018	2017
Statutory tax rate	21.0 %	21.0 %	17.0 %
State, net of federal benefit	(4.6)	(1.1)	—
2017 Tax reform	5.1	(159.0)	—
Redomiciliation transaction withholding tax remeasurement	—	(25.6)	—
Foreign income taxed at different rates	(52.5)	(16.3)	(0.8)
Excess tax benefits from stock-based compensation	(10.4)	(4.0)	—
Research and development credit	(7.6)	(2.9)	—
Deemed inclusion of foreign earnings	25.9	4.7	—
Tax holidays and concessions	—	—	(13.0)
Other, net	0.2	5.3	(1.3)
Effective tax rate on income before income taxes	(22.9)%	(177.9)%	1.9 %

Summary of Deferred Income Taxes

	November 3, 2019	November 4, 2018
	(In millions)	
Deferred income tax assets:		
Net operating loss, credit and other carryforwards	$ 1,733	$ 1,421
Deferred revenue	316	—
Employee stock awards	218	159
Other deferred income tax assets	313	226
Gross deferred income tax assets	2,580	1,806
Less valuation allowance	(1,563)	(1,347)
Deferred income tax assets	1,017	459
Deferred income tax liabilities:		
Depreciation and amortization	2,360	316
Foreign earnings not indefinitely reinvested	138	16
Other deferred income tax liabilities	—	12
Deferred income tax liabilities	2,498	344
Net deferred income tax assets (liabilities)	$ (1,481)	$ 115

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their basis for income tax purposes and the tax effects of net operating losses and tax credit carryforwards. The increase in deferred income tax liabilities for depreciation and amortization is primarily due to the CA Merger.

The following table presents net deferred income tax assets (liabilities) as reflected on the consolidated balance sheets:

	November 3, 2019	November 4, 2018
	(In millions)	
Other long-term assets	$ 50	$ 284
Other long-term liabilities	(1,531)	(169)
Net long-term income tax assets (liabilities)	$ (1,481)	$ 115

The increase in the valuation allowance to $1,563 million in fiscal year 2019 from $1,347 million in fiscal year 2018 was primarily due to the CA Merger, foreign deferred tax assets arising from foreign credits, and losses not expected to be realized.

As of November 3, 2019, we had U.S. federal net operating loss carryforwards of $123 million, U.S. state net operating loss carryforwards of $2,813 million and other foreign net operating loss carryforwards of $1,157 million. U.S. federal and state net operating loss carryforwards begin to expire in fiscal year 2020. The other foreign net operating losses expire in various fiscal years beginning 2020. As of November 3, 2019, we had $252 million and $1,653 million of U.S. federal and state research and development tax credits, respectively, which if not utilized, begin to expire in fiscal year 2020.

The U.S. Tax Reform Act of 1986 limits the use of net operating loss and tax credit carryforwards in the case of an "ownership change" of a corporation or separate return loss year limitations. Any ownership changes, as defined, may restrict utilization of carryforwards. As of November 3, 2019, we had approximately $123 million of federal net operating loss carryforwards in the U.S. subject to an annual limitation. We do not expect these limitations to result in any permanent loss of our tax benefits.

Uncertain Tax Positions

Gross unrecognized tax benefits increased by $392 million during fiscal year 2019, resulting in gross unrecognized tax benefits of $4,422 million as of November 3, 2019.

Gross unrecognized tax benefits increased by $1,774 million during fiscal year 2018, resulting in gross unrecognized tax benefits of $4,030 million as of November 4, 2018. The increase in gross unrecognized tax benefits was primarily due to the recognition of unrecognized tax positions of $1,112 million related to the Transition Tax, offset by a reduction of our federal deferred income tax liabilities on accumulated non-U.S. earnings. The increase in gross unrecognized tax benefits was also due to the Redomiciliation Transaction, and to a lesser extent, the Brocade Merger.

Gross unrecognized tax benefits increased by $273 million during fiscal year 2017, resulting in gross unrecognized tax benefits of $2,256 million as of October 29, 2017. The increase in gross unrecognized tax benefits was primarily a result of restructuring activities in fiscal year 2017. During fiscal year 2017, we recognized $121 million of previously unrecognized tax benefits as a result of the audit settlement with taxing authorities, and $12 million as a result of the expiration of the statute of limitations for certain audit periods.

We recognize interest and penalties related to unrecognized tax benefits within provision for income taxes in the accompanying consolidated statements of operations. Accrued interest and penalties were included within other long-term liabilities on the consolidated balance sheets. As of November 3, 2019 and November 4, 2018, the combined amount of cumulative accrued interest and penalties was approximately $303 million and $190 million, respectively. The increase in cumulative accrued interest and penalties was primarily a result of the CA Merger.

The following table reconciles the beginning and ending balance of gross unrecognized tax benefits:

	Fiscal Year		
	2019	2018	2017
		(In millions)	
Beginning balance	$ 4,030	$ 2,256	$ 1,983
Lapses of statutes of limitations	(36)	(20)	(12)
Increases in balances related to tax positions taken during prior periods (including those related to acquisitions made during the year)	467	361	47
Decreases in balances related to tax positions taken during prior periods	(270)	(289)	(32)
Increases in balances related to tax positions taken during current period	460	1,726	391
Decreases in balances related to settlement with taxing authorities	(229)	(4)	(121)
Ending balance	$ 4,422	$ 4,030	$ 2,256

A portion of our unrecognized tax benefits will affect our effective tax rate if they are recognized upon favorable resolution of the uncertain tax positions. As of November 3, 2019 and November 4, 2018, approximately $4,725 million and $4,220 million of the unrecognized tax benefits including accrued interest and penalties would affect our effective tax rate, respectively.

Decreases in balances related to tax positions taken during prior periods and settlement with taxing authorities related to the settlement of income tax audits in various jurisdictions during fiscal year 2019.

We are subject to U.S. income tax examination for fiscal years 2013 and later. Certain of our acquired companies are subject to tax examinations in major jurisdictions outside of the U.S. for fiscal years 2008 and later. It is possible that our existing unrecognized tax benefits may change up to $154 million as a result of lapses of the statute of limitations for certain audit periods and/or audit examinations expected to be completed within the next 12 months.

12. Segment Information

Reportable Segments

As a result of the CA Merger, which closed on November 5, 2018, we updated our organizational structure resulting in three reportable segments: semiconductor solutions, infrastructure software and IP licensing. Each segment represents a component for which separate financial information is available that is utilized on a regular basis by the CODM in determining how to allocate resources and evaluate performance. The reportable segments are determined based on several factors including, but not limited to, customer base, homogeneity of products, technology, delivery channels and similar economic characteristics.

Semiconductor solutions. We provide semiconductor solutions for managing the movement of data in data center, telecom, enterprise and embedded networking applications. We provide a broad variety of RF semiconductor devices, wireless connectivity solutions and custom touch controllers for mobile applications. We also provide semiconductor solutions for enabling the set-top box and broadband access markets and for enabling secure movement of digital data to and from host machines, such as servers, personal computers and storage systems, to the underlying storage devices, such as hard disk drives and solid state drives. We also provide a broad variety of products for the general industrial and automotive markets.

Infrastructure software. We provide a portfolio of mainframe, enterprise and storage area networking solutions, which enables customers to leverage the benefits of agility, automation, insights, resiliency and security in managing business processes and technology investments, and to reduce the cost and complexity of managing business information within a shared data storage environment.

IP licensing. We license a portion of our broad IP portfolio.

Our CODM assesses the performance of each segment and allocates resources to those segments based on net revenue and operating results and does not evaluate our segments using discrete asset information. Operating results by segment include items that are directly attributable to each segment and also include shared expenses such as global operations, including manufacturing support, logistics and quality control, in addition to expenses associated with selling, general and administrative activities for the business, which are allocated primarily based on revenue, while facilities expenses are allocated primarily based on site-specific headcount.

Unallocated Expenses

Unallocated expenses include amortization of acquisition-related intangible assets, stock-based compensation expense, restructuring, impairment and disposal charges, acquisition-related costs, charges related to inventory step-up to fair value, and other costs, which are not used in evaluating the results of, or in allocating resources to, our segments. Acquisition-related costs also include transaction costs and any costs directly related to the acquisition and integration of acquired businesses.

Depreciation expense directly attributable to each reportable segment is included in operating results for each segment. However, the CODM does not evaluate depreciation expense by operating segment and, therefore, it is not separately presented. There was no inter-segment revenue. The accounting policies of the segments are the same as those described in the summary of significant accounting policies.

	Fiscal Year		
	2019	2018	2017
	(In millions)		
Net revenue:			
Semiconductor solutions	$ 17,368	$ 18,934	$ 17,491
Infrastructure software	5,156	1,780	—
IP licensing	73	134	145
Total net revenue	$ 22,597	$ 20,848	$ 17,636
Operating income (loss):			
Semiconductor solutions	$ 8,150	$ 9,090	$ 7,900
Infrastructure software	3,781	1,250	—
IP licensing	(2)	70	70
Unallocated expenses	(8,485)	(5,275)	(5,599)
Total operating income	$ 3,444	$ 5,135	$ 2,371

Geographic Information

Net revenue by country is based on the geographic shipment or delivery location as specified by the distributors, OEMs, contract manufacturers, channel partners, or software customers who purchased our products or services. For the majority of our products, title and control transfer to our customers in Penang, Malaysia. The products are then transported to the customer specific locations. Net revenue from the United States for fiscal years 2019, 2018, and 2017 was $4,235 million, $2,697 million and $1,266 million, respectively. Net revenue from China (including Hong Kong) for fiscal years 2019, 2018 and 2017 was $8,056 million, $10,305 million and $9,460 million, respectively. Net revenue from Singapore for fiscal year 2019 was $2,507 million (amounts were below 10% for fiscal years 2018 and 2017). Net revenue from other foreign countries for fiscal years 2019, 2018 and 2017 was $7,799 million, $7,846 million and $6,910 million, respectively. These geographic delivery locations are not necessarily indicative of the geographic location of our end customers or the country in which our end customers sell devices containing our products. For example, we believe a substantial portion of our products shipped or delivered to China (including Hong Kong) is included in devices sold by our end customers in the United States and Europe.

Long-lived assets include property, plant and equipment and are based on the physical location of the assets.

	November 3, 2019	November 4, 2018
	(In millions)	
Long-lived assets:		
United States	$ 1,763	$ 1,859
Taiwan	258	264
Other	544	512
Total long-lived assets	$ 2,565	$ 2,635

Significant Customer Information

We sell our products through our direct sales force and a select network of distributors globally. One customer accounted for 24% of our net accounts receivable balance at November 3, 2019 compared with two customers which accounted for 20% and 14% of our net accounts receivable balance at November 4, 2018. During fiscal year 2019, one customer accounted for 17% of our net revenue. Revenue from this customer was included in our semiconductor solutions segment. During fiscal year 2018, no direct customers represented more than 10% of our net revenue. During fiscal year 2017, one customer represented 14% of our net revenue. The majority of the revenue from this customer was included in our semiconductor solutions segment.

13. Commitments and Contingencies

Commitments

The following table summarizes contractual obligations and commitments as of November 3, 2019:

	Total	Fiscal Year 2020	2021	2022	2023	2024	Thereafter
	(In millions)						
Debt principal, interest and fees	$ 39,038	$ 5,628	$ 3,748	$ 6,415	$ 2,025	$ 5,996	$ 15,226
Purchase commitments	716	652	64	—	—	—	—
Other contractual commitments	197	133	31	19	14	—	—
Operating lease obligations	800	115	99	80	69	47	390
Total	$ 40,751	$ 6,528	$ 3,942	$ 6,514	$ 2,108	$ 6,043	$ 15,616

Debt Principal, Interest and Fees. Represents principal, estimated interest and fees on borrowings. For borrowings subject to a floating interest rate, the estimated interest was based on the rate in effect during the last month of the fiscal year ended November 3, 2019.

Purchase Commitments. Represents unconditional purchase obligations that include agreements to purchase goods or services, primarily inventory, that are enforceable and legally binding on us and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions, and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty. Cancellation for outstanding purchase orders for capital expenditures in connection with internal fabrication facility expansion and construction of our new campuses is generally allowed but requires payment of all costs incurred through the date of cancellation and, therefore, cancelable purchase orders for these capital expenditures are included in the table above.

Other Contractual Commitments. Represents amounts payable pursuant to agreements related to information technology, human resources, and other service agreements.

Operating Lease Obligations. Represents real property and equipment leased from third parties under non-cancelable operating leases. Rent expense was $244 million, $233 million and $253 million for fiscal years 2019, 2018 and 2017, respectively.

Due to the inherent uncertainty with respect to the timing of future cash outflows associated with our unrecognized tax benefits at November 3, 2019, we are unable to reliably estimate the timing of cash settlement with the respective taxing authority. Therefore, $3,269 million of unrecognized tax benefits and accrued interest classified within other long-term liabilities on our consolidated balance sheet as of November 3, 2019 have been excluded from the contractual obligations table above.

Standby Letters of Credit

As of November 3, 2019 and November 4, 2018, we had standby letters of credit of $62 million and $14 million, respectively. Standby letters of credit are financial guarantees provided by third parties for leases, customs, taxes and certain self-insured risks. If the guarantees are called, we must reimburse the provider of the guarantees.

Contingencies

From time to time, we are involved in litigation that we believe is of the type common to companies engaged in our line of business, including commercial disputes, employment issues and disputes involving claims by third parties that our activities infringe their patent, copyright, trademark or other IP rights. Legal proceedings are often complex, may require the expenditure of significant funds and other resources, and the outcome of litigation is inherently uncertain, with material adverse outcomes possible. IP property claims generally involve the demand by a third-party that we cease the manufacture, use or sale of the allegedly infringing products, processes or technologies and/or pay substantial damages or royalties for past, present and future use of the allegedly infringing IP. Claims that our products or processes infringe or misappropriate any third-party IP rights (including claims arising through our contractual indemnification of our customers) often involve highly complex, technical issues, the outcome of which is inherently uncertain. Moreover, from time to time, we pursue litigation to assert our IP rights. Regardless of the merit or resolution of any such litigation, complex IP litigation is generally costly and diverts the efforts and attention of our management and technical personnel.

Lawsuits Relating to the Acquisition of Emulex Corporation

On April 8, 2015, a putative class action complaint was filed in the U.S. Central District Court, entitled Gary Varjabedian, et al. v. Emulex Corporation, et al., No. 8:15-cv-554-CJC-JCG. The complaint names as defendants Emulex Corporation ("Emulex"), its directors, AT Wireless and Emerald Merger Sub, and purported to assert claims under Sections 14(d), 14(e) and 20(a) of the Exchange Act. The complaint alleged, among other things, that the board of directors of Emulex failed to provide material information and/or omitted material information from the Solicitation/Recommendation Statement on Schedule 14D-9 filed with the SEC on April 7, 2015 by Emulex, together with the exhibits and annexes thereto. The complaint sought to enjoin the tender offer to purchase all of the outstanding shares of Emulex common stock, as well as certain other equitable relief and attorneys' fees and costs. On July 28, 2015, the U.S. Central District Court issued an order appointing the lead plaintiff and approving lead counsel for the putative class. On September 9, 2015, plaintiff filed a first amended complaint seeking rescission of the merger, unspecified money damages, other equitable relief and attorneys' fees and costs. On October 13, 2015, defendants moved to dismiss the first amended complaint, which the U.S. Central District Court granted with prejudice on January 13, 2016. Plaintiff filed a notice of appeal to the United States Court of Appeals for the Ninth Circuit (the "Ninth Circuit Court") on January 15, 2016. The appeal is captioned Gary Varjabedian, et al. v. Emulex Corporation, et al., No. 16-55088. On June 27, 2016, the Plaintiff-Appellant filed his opening brief, on August 17 and August 22, 2016, the Defendants-Appellees filed their answering briefs, and on October 5, 2016 Plaintiff-Appellant filed his reply brief. The Ninth Circuit Court heard oral arguments on October 5, 2017. On April 20, 2018, the Ninth Circuit Court issued an opinion affirming in part and reversing in part the decision of the U.S. Central District Court and remanding Plaintiff-Appellant's claims under Sections 14(e) and 20(a) of the Exchange Act to the U.S. Central District Court for reconsideration. On May 4, 2018, the Defendants-Appellees filed a Petition for Rehearing En Banc with the Ninth Circuit Court. On July 13, 2018, Plaintiff-Appellant filed an Opposition to the Petition for Rehearing En Banc. On September 6, 2018, the Ninth Circuit Court issued an order denying the Petition for Rehearing En Banc. On October 11, 2018, Defendants-Appellees filed a Petition for a Writ of Certiorari to the United States Supreme Court (the "U.S. Supreme Court"). On January 4, 2019, the U.S. Supreme Court granted certiorari. On April 23, 2019, the U.S. Supreme Court dismissed the writ of certiorari as having been improvidently granted. On May 28, 2019, the Ninth Circuit Court remanded the case back to the U.S. Central District Court. On October 6, 2019, Plaintiffs voluntarily dismissed AT Wireless from this action. On October 7, 2019, the remaining defendants, Emulex and its directors, filed motions to dismiss the complaint, which are set to be heard on February 4, 2020. We believe these claims are all without merit and intend to vigorously defend these actions.

Other Matters

In addition to the matters discussed above, we are currently engaged in a number of legal actions in the ordinary course of our business.

Contingency Assessment

We do not believe, based on currently available facts and circumstances, that the final outcome of any pending legal proceedings or ongoing regulatory investigations, taken individually or as a whole, will have a material adverse effect on our consolidated financial statements. However, lawsuits may involve complex questions of fact and law and may require the expenditure of significant funds and other resources to defend. The results of litigation or regulatory investigations are inherently uncertain, and material adverse outcomes are possible. From time to time, we may enter into confidential discussions regarding the potential settlement of such lawsuits. Any settlement of pending litigation could require us to incur substantial costs and other ongoing expenses, such as future royalty payments in the case of an intellectual property dispute.

During the periods presented, no material amounts have been accrued or disclosed in the accompanying consolidated financial statements with respect to loss contingencies associated with any other legal proceedings or regulatory investigations, as potential losses for such matters are not considered probable and ranges of losses are not reasonably estimable. These matters are subject to many uncertainties and the ultimate outcomes are not predictable. There can be no assurances that the actual amounts required to satisfy any liabilities arising from the matters described above will not have a material adverse effect on our consolidated financial statements.

Other Indemnifications

As is customary in our industry and as provided for in local law in the U.S. and other jurisdictions, many of our standard contracts provide remedies to our customers and others with whom we enter into contracts, such as defense, settlement, or payment of judgment for IP claims related to the use of our products. From time to time, we indemnify customers, as well as our suppliers, contractors, lessors, lessees, companies that purchase our businesses or assets and others with whom we enter into contracts, against combinations of loss, expense, or liability arising from various triggering events related to the sale and the use of our products, the use of their goods and services, the use of facilities and state of our owned facilities, the state of the assets and businesses that we sell and other matters covered by such contracts, usually up to a specified maximum amount. In addition, from time to time we also provide protection to these parties against claims related to undiscovered liabilities, additional product liabilities or environmental obligations. In our experience, claims made under such indemnifications are rare and the associated estimated fair value of the liability is not material.

14. Restructuring, Impairment and Disposal Charges

Restructuring Charges

The following is a summary of significant restructuring expense recognized in continuing operations, primarily in operating expenses:

- During fiscal year 2019, we initiated cost reduction activities associated with the CA Merger. As a result, we recognized $740 million of restructuring expense primarily related to employee termination and lease and other exit costs during fiscal year 2019. We expect these restructuring activities to be substantially completed by the end of fiscal year 2020.
- During fiscal year 2018, we initiated cost reduction activities associated with the Brocade Merger. As a result, we recognized $2 million and $176 million of restructuring expense in fiscal years 2019 and 2018, respectively. These charges primarily related to employee termination costs. We have substantially completed the restructuring activities related to the acquisition of Brocade.
- In connection with cost reduction activities associated with the acquisition of BRCM, we recognized $4 million, $50 million and $124 million of restructuring expense in fiscal years 2019, 2018 and 2017, respectively. These restructuring expenses primarily related to lease and other exit costs for fiscal years 2019 and 2018 and employee termination costs for fiscal year 2017. We have substantially completed the restructuring activities related to the acquisition of BRCM.

	Employee Termination Costs	Lease and Other Exit Costs	Total
		(In millions)	
Balance as of October 30, 2016	$ 116	$ 35	$ 151
Restructuring charges (a)	86	43	129
Utilization	(174)	(61)	(235)
Balance as of October 29, 2017	28	17	45
Restructuring charges (a)	153	75	228
Utilization	(165)	(86)	(251)
Balance as of November 4, 2018	16	6	22
Liabilities assumed from CA	29	38	67
Restructuring charges	586	160	746
Utilization	(562)	(165)	(727)
Balance as of November 3, 2019 (b)	$ 69	$ 39	$ 108

(a) Included $2 million and $5 million of restructuring charges related to discontinued operations recognized during fiscal years 2018 and 2017, respectively, which was included in loss from discontinued operations in our consolidated statements of operations.

(b) The majority of the employee termination costs balance is expected to be paid within the first half of fiscal year 2020. The majority of the leases and other exit costs balance is expected to be paid through the fiscal year ending November 2, 2025.

Impairment and Disposal Charges

During fiscal year 2019, impairment and disposal charges of $67 million primarily related to property, plant and equipment. During fiscal year 2018, impairment and disposal charges of $13 million primarily related to leasehold improvements. During fiscal year 2017, impairment and disposal charges of $56 million related to property, plant and equipment and IPR&D projects acquired in the BRCM acquisition.

15. Condensed Consolidating Financial Information

As of November 4, 2018, the 2017 Senior Notes were fully and unconditionally guaranteed, jointly and severally, on an unsecured, unsubordinated basis by Broadcom and Broadcom-Singapore. Substantially all of the 2017 Senior Notes have been registered with the SEC. During fiscal year 2019, we liquidated Broadcom-Singapore and de-registered the Partnership. BTI, a 100%-owned subsidiary of Broadcom, became a guarantor of the 2017 Senior Notes and entered into supplemental indentures with BRCM, Cayman Finance and the trustee of the 2017 Senior Notes. As a result, Broadcom-Singapore was released from its guarantee of the 2017 Senior Notes as Subsidiary Guarantor under each of their respective indentures in accordance with their terms. On May 15, 2019, Cayman Finance was merged into BTI, with BTI remaining as the surviving entity. In connection with this merger, BTI remains a guarantor and became a co-issuer of the 2017 Senior Notes.

Accordingly, we updated the guarantor structure, which resulted in the following revised column headings:

- Parent Guarantor (Broadcom)
- Subsidiary Issuers (BTI and BRCM)
- Non-Guarantor Subsidiaries (our other subsidiaries)

We have applied the impacts of the change in guarantors and issuers retrospectively to all periods presented.

The following tables set forth the condensed consolidating financial information for the Parent Guarantor, the Subsidiary Issuers, and the Non-Guarantor Subsidiaries for the periods presented. Investments in subsidiaries are accounted for under the equity method; accordingly, entries necessary to consolidate the Parent Guarantor, the Subsidiary Issuers and the Non-Guarantor Subsidiaries are reflected in the Eliminations column. In the opinion of management, separate complete financial statements of the Subsidiary Issuers would not provide additional material information that would be useful in assessing their financial composition.

Condensed Consolidating Balance Sheets

November 3, 2019

	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
			(In millions)		
ASSETS					
Current assets:					
Cash and cash equivalents	$ 374	$ 613	$ 4,068	$ —	$ 5,055
Trade accounts receivable, net	—	—	3,259	—	3,259
Inventory	—	—	874	—	874
Intercompany receivable	59	439	35	(533)	—
Intercompany loan receivable	—	10,576	9,188	(19,764)	—
Other current assets	58	37	634	—	729
Total current assets	491	11,665	18,058	(20,297)	9,917
Long-term assets:					
Property, plant and equipment, net	—	759	1,806	—	2,565
Goodwill	—	1,360	35,354	—	36,714
Intangible assets, net	—	76	17,478	—	17,554
Investment in subsidiaries	51,558	45,981	—	(97,539)	—
Intercompany loan receivable, long-term	—	—	932	(932)	—
Other long-term assets	25	95	623	—	743
Total assets	$ 52,074	$ 59,936	$ 74,251	$ (118,768)	$ 67,493
LIABILITIES AND EQUITY					
Current liabilities:					
Accounts payable	$ 24	$ 38	$ 793	$ —	$ 855
Employee compensation and benefits	—	179	462	—	641
Current portion of long-term debt	—	2,750	37	—	2,787
Intercompany payable	32	4	497	(533)	—
Intercompany loan payable	13,709	4,935	1,120	(19,764)	—
Other current liabilities	25	186	2,405	—	2,616
Total current liabilities	13,790	8,092	5,314	(20,297)	6,899
Long-term liabilities:					
Long-term debt	13,440	14,731	1,840	—	30,011
Deferred tax liabilities	(126) (a)	(295) (a)	1,952	—	1,531
Intercompany loan payable, long-term	—	932	—	(932)	—
Unrecognized tax benefits	—	2,422	847	—	3,269
Other long-term liabilities	—	107	706	—	813
Total liabilities	27,104	25,989	10,659	(21,229)	42,523
Preferred stock dividend obligation	29	—	—	—	29
Total stockholders’ equity	24,941	33,947	63,592	(97,539)	24,941
Total liabilities and equity	$ 52,074	$ 59,936	$ 74,251	$ (118,768)	$ 67,493

(a) Amount represents net deferred tax assets that are offset by net deferred tax liabilities on a consolidated basis.

	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	Condensed Consolidating Balance Sheets				
	November 4, 2018				
	(In millions)				
ASSETS					
Current assets:					
Cash and cash equivalents	$ —	$ 2,461	$ 1,831	$ —	$ 4,292
Trade accounts receivable, net	—	—	3,325	—	3,325
Inventory	—	—	1,124	—	1,124
Intercompany receivable	56	182	67	(305)	—
Intercompany loan receivable	—	9,780	4,713	(14,493)	—
Other current assets	52	37	277	—	366
Total current assets	108	12,460	11,337	(14,798)	9,107
Long-term assets:					
Property, plant and equipment, net	—	772	1,863	—	2,635
Goodwill	—	1,360	25,553	—	26,913
Intangible assets, net	—	84	10,678	—	10,762
Investment in subsidiaries	35,268	46,742	—	(82,010)	—
Intercompany loan receivable, long-term	—	—	991	(991)	—
Other long-term assets	—	250	457	—	707
Total assets	$ 35,376	$ 61,668	$ 50,879	$ (97,799)	$ 50,124
LIABILITIES AND EQUITY					
Current liabilities:					
Accounts payable	$ 19	$ 44	$ 748	$ —	$ 811
Employee compensation and benefits	—	272	443	—	715
Intercompany payable	9	58	238	(305)	—
Intercompany loan payable	8,691	4,713	1,089	(14,493)	—
Other current liabilities	—	219	593	—	812
Total current liabilities	8,719	5,306	3,111	(14,798)	2,338
Long-term liabilities:					
Long-term debt	—	17,456	37	—	17,493
Deferred tax liabilities	—	(47) (a)	216	—	169
Intercompany loan payable, long-term	—	991	—	(991)	—
Unrecognized tax benefits	—	2,563	525	—	3,088
Other long-term liabilities	—	131	248	—	379
Total liabilities	8,719	26,400	4,137	(15,789)	23,467
Total stockholders' equity	26,657	35,268	46,742	(82,010)	26,657
Total liabilities and equity	$ 35,376	$ 61,668	$ 50,879	$ (97,799)	$ 50,124

(a) Amount represents net deferred tax assets that are offset by net deferred tax liabilities on a consolidated basis.

	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	Condensed Consolidating Statements of Operations and Comprehensive Income Fiscal Year Ended November 3, 2019 (In millions)				
Net revenue:					
Products	$ —	$ —	$ 18,117	$ —	$ 18,117
Subscriptions and services	—	—	4,480	—	4,480
Intercompany revenue	—	1,573	—	(1,573)	—
Total net revenue	—	1,573	22,597	(1,573)	22,597
Cost of revenue:					
Cost of products sold	—	138	6,070	—	6,208
Cost of subscriptions and services	—	15	500	—	515
Intercompany cost of products sold	—	—	122	(122)	—
Amortization of acquisition-related intangible assets	—	—	3,314	—	3,314
Restructuring charges	—	(7)	84	—	77
Total cost of revenue	—	146	10,090	(122)	10,114
Gross margin	—	1,427	12,507	(1,451)	12,483
Research and development	—	1,885	2,811	—	4,696
Intercompany operating expense	—	—	1,451	(1,451)	—
Selling, general and administrative	129	324	1,256	—	1,709
Amortization of acquisition-related intangible assets	—	—	1,898	—	1,898
Restructuring, impairment and disposal charges	—	17	719	—	736
Total operating expenses	129	2,226	8,135	(1,451)	9,039
Operating income (loss)	(129)	(799)	4,372	—	3,444
Interest expense	(753)	(591)	(100)	—	(1,444)
Intercompany interest expense	(369)	(162)	(35)	566	—
Other income, net	3	25	198	—	226
Intercompany interest income	—	308	258	(566)	—
Intercompany other income (expense), net	893	—	(893)	—	—
Income (loss) from continuing operations before income taxes and earnings in subsidiaries	(355)	(1,219)	3,800	—	2,226
Provision for (benefit from) income taxes	(277)	136	(369)	—	(510)
Income (loss) from continuing operations before earnings in subsidiaries	(78)	(1,355)	4,169	—	2,736
Earnings in subsidiaries	2,802	5,299	—	(8,101)	—
Income from continuing operations and earnings in subsidiaries	2,724	3,944	4,169	(8,101)	2,736
Loss from discontinued operations, net of income taxes	—	—	(12)	—	(12)
Net income	$ 2,724	$ 3,944	$ 4,157	$ (8,101)	$ 2,724
Net income	$ 2,724	$ 3,944	$ 4,157	$ (8,101)	$ 2,724
Other comprehensive loss, net of tax:					
Change in actuarial loss and prior service costs associated with defined benefit pension plans and post-retirement benefit plans	—	—	(24)	—	(24)
Other comprehensive loss	—	—	(24)	—	(24)
Comprehensive income	$ 2,724	$ 3,944	$ 4,133	$ (8,101)	$ 2,700

	Condensed Consolidating Statements of Operations and Comprehensive Income				
	Fiscal Year Ended				
	November 4, 2018				
	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	(In millions)				
Net revenue:					
Products	$ —	$ —	$ 19,754	$ —	$ 19,754
Subscriptions and services	—	—	1,094	—	1,094
Intercompany revenue	—	1,924	—	(1,924)	—
Total net revenue	—	1,924	20,848	(1,924)	20,848
Cost of revenue:					
Cost of products sold	—	120	6,804	—	6,924
Cost of subscriptions and services	—	12	85	—	97
Intercompany cost of products sold	—	—	126	(126)	—
Purchase accounting effect on inventory	—	—	70	—	70
Amortization of acquisition-related intangible assets	—	—	3,004	—	3,004
Restructuring charges	—	1	19	—	20
Total cost of revenue	—	133	10,108	(126)	10,115
Gross margin	—	1,791	10,740	(1,798)	10,733
Research and development	—	1,651	2,117	—	3,768
Intercompany operating expense	—	—	1,798	(1,798)	—
Selling, general and administrative	31	297	728	—	1,056
Amortization of acquisition-related intangible assets	—	—	541	—	541
Restructuring, impairment and disposal charges	—	53	166	—	219
Litigation settlements	—	14	—	—	14
Total operating expenses	31	2,015	5,350	(1,798)	5,598
Operating income (loss)	(31)	(224)	5,390	—	5,135
Interest expense	—	(626)	(2)	—	(628)
Intercompany interest expense	(67)	(199)	(1,449)	1,715	—
Impairment on investment	—	—	(106)	—	(106)
Other income, net	—	88	56	—	144
Intercompany interest income	—	1,516	199	(1,715)	—
Intercompany other income (expense), net	111	(56)	(55)	—	—
Income from continuing operations before income taxes and earnings in subsidiaries	13	499	4,033	—	4,545
Provision for (benefit from) income taxes	44	(7,878)	(250)	—	(8,084)
Income (loss) from continuing operations before earnings in subsidiaries	(31)	8,377	4,283	—	12,629
Earnings in subsidiaries	12,290	4,266	—	(16,556)	—
Income from continuing operations and earnings in subsidiaries	12,259	12,643	4,283	(16,556)	12,629
Loss from discontinued operations, net of income taxes	—	(2)	(17)	—	(19)
Net income	12,259	12,641	4,266	(16,556)	12,610
Net income attributable to noncontrolling interest	—	351	—	—	351
Net income attributable to common stock	$ 12,259	$ 12,290	$ 4,266	$ (16,556)	$ 12,259
Net income	$ 12,259	$ 12,641	$ 4,266	$ (16,556)	$ 12,610
Other comprehensive loss, net of tax:					
Change in actuarial loss and prior service costs associated with defined benefit pension plans and post-retirement benefit plans	—	—	(8)	—	(8)
Other comprehensive loss	—	—	(8)	—	(8)
Comprehensive income	12,259	12,641	4,258	(16,556)	12,602
Comprehensive income attributable to noncontrolling interest	—	351	—	—	351
Comprehensive income attributable to Broadcom Inc. stockholders	$ 12,259	$ 12,290	$ 4,258	$ (16,556)	$ 12,251

	Condensed Consolidating Statements of Operations and Comprehensive Income				
	Fiscal Year Ended				
	October 29, 2017				
	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	(In millions)				
Net revenue:					
Products	$ —	$ 71	$ 16,962	$ —	$ 17,033
Subscriptions and services	—	2	601	—	603
Intercompany revenue	—	2,046	8	(2,054)	—
Total net revenue	—	2,119	17,571	(2,054)	17,636
Cost of revenue:					
Cost of products sold	—	142	6,407	—	6,549
Cost of subscriptions and services	—	12	32	—	44
Intercompany cost of products sold	—	(12)	174	(162)	—
Purchase accounting effect on inventory	—	—	4	—	4
Amortization of acquisition-related intangible assets	—	7	2,504	—	2,511
Restructuring charges	—	5	14	—	19
Total cost of revenue	—	154	9,135	(162)	9,127
Gross margin	—	1,965	8,436	(1,892)	8,509
Research and development	—	1,490	1,812	—	3,302
Intercompany operating expense	—	(66)	1,958	(1,892)	—
Selling, general and administrative	—	339	450	—	789
Amortization of acquisition-related intangible assets	—	7	1,757	—	1,764
Restructuring, impairment and disposal charges	—	54	107	—	161
Litigation settlements	—	—	122	—	122
Total operating expenses	—	1,824	6,206	(1,892)	6,138
Operating income	—	141	2,230	—	2,371
Interest expense	—	(411)	(43)	—	(454)
Intercompany interest expense	—	(274)	(1,425)	1,699	—
Loss on extinguishment of debt	—	(59)	(107)	—	(166)
Other income, net	—	30	44	—	74
Intercompany interest income	—	1,425	274	(1,699)	—
Intercompany other income (expense), net	—	(589)	589	—	—
Income from continuing operations before income taxes and earnings in subsidiaries	—	263	1,562	—	1,825
Provision for (benefit from) income taxes	—	67	(32)	—	35
Income from continuing operations before earnings in subsidiaries	—	196	1,594	—	1,790
Earnings in subsidiaries	1,692	1,601	—	(3,293)	—
Income from continuing operations and earnings in subsidiaries	1,692	1,797	1,594	(3,293)	1,790
Income (loss) from discontinued operations, net of income taxes	—	(13)	7	—	(6)
Net income	1,692	1,784	1,601	(3,293)	1,784
Net income attributable to noncontrolling interest	—	92	—	—	92
Net income attributable to common stock	$ 1,692	$ 1,692	$ 1,601	$ (3,293)	$ 1,692
Net income	$ 1,692	$ 1,784	$ 1,601	$ (3,293)	$ 1,784
Other comprehensive income, net of tax:					
Change in actuarial loss and prior service costs associated with defined benefit pension plans and post-retirement benefit plans	—	—	43	—	43
Other comprehensive income	—	—	43	—	43
Comprehensive income	1,692	1,784	1,644	(3,293)	1,827
Comprehensive income attributable to noncontrolling interest	—	92	—	—	92
Comprehensive income attributable to Broadcom Inc. stockholders	$ 1,692	$ 1,692	$ 1,644	$ (3,293)	$ 1,735

	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	Condensed Consolidating Statements of Cash Flows				
	Fiscal Year Ended				
	November 3, 2019				
	(In millions)				
Cash flows from operating activities:					
Net income	$ 2,724	$ 3,944	$ 4,157	$ (8,101)	$ 2,724
Adjustments to reconcile net income to net cash provided by (used in) operating activities	(3,264)	(4,571)	6,707	8,101	6,973
Net cash provided by (used in) operating activities	(540)	(627)	10,864	—	9,697
Cash flows from investing activities:					
Net change in intercompany loans	1,375	(796)	(9,210)	8,631	—
Acquisitions of businesses, net of cash acquired	(17,865)	—	1,832	—	(16,033)
Proceeds from sales of businesses	—	—	957	—	957
Purchases of property, plant and equipment	—	(165)	(297)	30	(432)
Proceeds from disposals of property, plant and equipment	—	30	88	(30)	88
Purchases of investments	(5)	—	—	—	(5)
Proceeds from sales of investments	—	—	5	—	5
Other	—	—	(2)	—	(2)
Net cash used in investing activities	(16,495)	(931)	(6,627)	8,631	(15,422)
Cash flows from financing activities:					
Net intercompany borrowings	9,818	156	(1,343)	(8,631)	—
Proceeds from long-term borrowings	28,793	—	—	—	28,793
Repayment of debt	(16,400)	—	(400)	—	(16,800)
Other borrowings	986	—	255	—	1,241
Dividend and distribution payments on common stock and exchangeable limited partnership units	(4,235)	—	—	—	(4,235)
Repurchases of common stock - repurchase program	(5,435)	—	—	—	(5,435)
Shares repurchased for tax withholdings on vesting of equity awards	—	(446)	(526)	—	(972)
Issuance of preferred stock, net	3,679	—	—	—	3,679
Issuance of common stock	253	—	—	—	253
Other	(50)	—	14	—	(36)
Net cash provided by (used in) financing activities	17,409	(290)	(2,000)	(8,631)	6,488
Net change in cash and cash equivalents	374	(1,848)	2,237	—	763
Cash and cash equivalents at beginning of period	—	2,461	1,831	—	4,292
Cash and cash equivalents at end of period	$ 374	$ 613	$ 4,068	$ —	$ 5,055

	Condensed Consolidating Statements of Cash Flows				
	Fiscal Year Ended				
	November 4, 2018				
	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	(In millions)				
Cash flows from operating activities:					
Net income	$ 12,259	$ 12,641	$ 4,266	$ (16,556)	$ 12,610
Adjustments to reconcile net income to net cash provided by (used in) operating activities	(12,323)	(12,893)	4,701	16,785	(3,730)
Net cash provided by (used in) operating activities	(64)	(252)	8,967	229	8,880
Cash flows from investing activities:					
Intercompany contributions paid	—	(9,099)	(3,002)	12,101	—
Distributions received from subsidiaries	—	—	1,521	(1,521)	—
Net change in intercompany loans	—	2,637	(261)	(2,376)	—
Acquisitions of businesses, net of cash acquired	—	—	(4,800)	—	(4,800)
Proceeds from sales of businesses	—	—	773	—	773
Purchases of property, plant and equipment	—	(196)	(497)	58	(635)
Proceeds from disposals of property, plant and equipment	—	55	242	(58)	239
Purchases of investments	—	(50)	(199)	—	(249)
Proceeds from sales of investments	—	54	—	—	54
Other	—	(50)	(6)	—	(56)
Net cash used in investing activities	—	(6,649)	(6,229)	8,204	(4,674)
Cash flows from financing activities:					
Intercompany contributions received	—	3,231	9,099	(12,330)	—
Net intercompany borrowings	8,690	261	(11,327)	2,376	—
Repayment of debt	—	(117)	(856)	—	(973)
Dividend and distribution payments on common stock and exchangeable limited partnership units	(1,477)	(1,521)	(1,521)	1,521	(2,998)
Repurchases of common stock - repurchase program	(7,258)	—	—	—	(7,258)
Shares repurchased for tax withholdings on vesting of equity awards	—	(20)	(36)	—	(56)
Issuance of common stock	109	—	103	—	212
Other	—	(27)	(18)	—	(45)
Net cash provided by (used in) financing activities	64	1,807	(4,556)	(8,433)	(11,118)
Net change in cash and cash equivalents	—	(5,094)	(1,818)	—	(6,912)
Cash and cash equivalents at the beginning of period	—	7,555	3,649	—	11,204
Cash and cash equivalents at end of period	$ —	$ 2,461	$ 1,831	$ —	$ 4,292

	Parent Guarantor	Subsidiary Issuers	Non-Guarantor Subsidiaries	Eliminations	Consolidated Totals
	Condensed Consolidating Statements of Cash Flows				
	Fiscal Year Ended October 29, 2017				
	(in millions)				
Cash flows from operating activities:					
Net income	$ 1,692	$ 1,784	$ 1,601	$ (3,293)	$ 1,784
Adjustments to reconcile net income to net cash provided by operating activities	(1,692)	924	2,077	3,458	4,767
Net cash provided by operating activities	—	2,708	3,678	165	6,551
Cash flows from investing activities:					
Intercompany contributions paid	—	—	(40)	40	—
Distributions received from subsidiaries	—	—	1,834	(1,834)	—
Net change in intercompany loans	—	(286)	5,835	(5,549)	—
Acquisitions of businesses, net of cash acquired	—	—	(40)	—	(40)
Proceeds from sales of businesses	—	—	10	—	10
Purchases of property, plant and equipment	—	(254)	(841)	26	(1,069)
Proceeds from disposals of property, plant and equipment	—	25	442	(26)	441
Purchases of investments	—	(200)	(7)	—	(207)
Proceeds from maturities of investments	—	200	—	—	200
Other	—	—	(9)	—	(9)
Net cash provided by (used in) investing activities	—	(515)	7,184	(7,343)	(674)
Cash flows from financing activities:					
Intercompany contributions received	—	205	—	(205)	—
Net intercompany borrowings	—	(5,797)	248	5,549	—
Proceeds from long-term borrowings	—	17,426	—	—	17,426
Repayment of debt	—	(5,704)	(7,964)	—	(13,668)
Dividend and distribution payments on common stock and exchangeable limited partnership units	—	(1,834)	(1,745)	1,834	(1,745)
Issuance of common stock	—	—	257	—	257
Other	—	(26)	(14)	—	(40)
Net cash provided by (used in) financing activities	—	4,270	(9,218)	7,178	2,230
Net change in cash and cash equivalents	—	6,463	1,644	—	8,107
Cash and cash equivalents at beginning of period	—	1,092	2,005	—	3,097
Cash and cash equivalents at end of period	$ —	$ 7,555	$ 3,649	$ —	$ 11,204

16. Subsequent Events

Acquisition of Symantec Corporation's Enterprise Security Business

On November 4, 2019, we completed the purchase and assumption of certain assets and certain liabilities, respectively, of Symantec Corporation's Enterprise Security business for approximately $10.7 billion in cash (the "Symantec Asset Purchase").

We expect to account for the Symantec Asset Purchase as a business combination and are currently evaluating the purchase price allocation. It is not practicable to disclose the preliminary purchase price allocation or unaudited pro forma combined financial information for this transaction, given the short period of time between the acquisition date and the issuance of these consolidated financial statements.

2020 Term Loans

In connection with the Symantec Asset Purchase, we entered into a credit agreement (the "2020 Credit Agreement"), which provides for a $7,750 million unsecured term A-3 facility due November 2022 and a $7,750 million unsecured term A-5 facility due November 2024, collectively referred to as the "2020 Term Loans". The 2020 Credit Agreement has substantially the same representations and warranties, covenants and events of default as the 2019 Credit Agreement. On November 4, 2019, we used $12 billion of the net proceeds from the 2020 Term Loans to fund the Symantec Asset Purchase and related working capital needs. On December 2, 2019, we refinanced our 5.375% notes due December 2019 using $750 million of net proceeds from the 2020 Term Loans. The remaining net proceeds from the 2020 Term Loans of $2,750 million are available to refinance our 2.375% notes due January 2020.

Principal payments of 2.50% of the original aggregate principal amount borrowed on our 2020 Term Loans are due quarterly beginning in March 2020 with the remaining principal due upon the respective maturity dates of our 2020 Term Loans. Interest on our 2020 Term Loans is based on a floating rate and is payable monthly. Our obligations under the 2020 Credit Agreement are guaranteed on an unsecured basis by our subsidiaries, BRCM and BTI.

Preferred Stock Cash Dividends Declared

On December 10, 2019, our Board of Directors declared a quarterly cash dividend of $20.00 per share on our Mandatory Convertible Preferred Stock, payable on December 31, 2019 to stockholders of record on December 15, 2019.

Common Stock Cash Dividends Declared

On December 10, 2019, our Board of Directors declared a quarterly cash dividend of $3.25 per share on our common stock, payable on December 31, 2019 to stockholders of record on December 23, 2019.

Supplementary Financial Data — Quarterly Data (Unaudited)

	Fiscal Quarter Ended							
	November 3, 2019 (1)	August 4, 2019 (2)	May 5, 2019 (3)	February 3, 2019 (4)	November 4, 2018 (5)	August 5, 2018 (6)	May 6, 2018 (7)	February 4, 2018 (8)
	(In millions, except per share data)							
Total net revenue (9)	$ 5,776	$ 5,515	$ 5,517	$ 5,789	$ 5,444	$ 5,063	$ 5,014	$ 5,327
Gross margin	$ 3,152	$ 3,034	$ 3,089	$ 3,208	$ 2,935	$ 2,619	$ 2,551	$ 2,628
Operating income	$ 1,054	$ 865	$ 970	$ 555	$ 1,652	$ 1,339	$ 1,201	$ 943
Income from continuing operations	$ 847	$ 715	$ 693	$ 481	$ 1,115	$ 1,197	$ 3,736	$ 6,581
Loss from discontinued operations, net of income taxes	—	—	(2)	(10)	—	(1)	(3)	(15)
Net income	847	715	691	471	1,115	1,196	3,733	6,566
Dividends on preferred stock	29	—	—	—	—	—	—	—
Net income attributable to noncontrolling interest	—	—	—	—	—	—	15	336
Net income attributable to common stock	$ 818	$ 715	$ 691	$ 471	$ 1,115	$ 1,196	$ 3,718	$ 6,230
Diluted income per share attributable to common stock:								
Income per share from continuing operations	$ 1.97	$ 1.71	$ 1.64	$ 1.15	$ 2.64	$ 2.71	$ 8.34	$ 14.66
Loss per share from discontinued operations	—	—	—	(0.03)	—	—	(0.01)	(0.04)
Net income per share	$ 1.97	$ 1.71	$ 1.64	$ 1.12	$ 2.64	$ 2.71	$ 8.33	$ 14.62
Dividends declared and paid per share	$ 2.65	$ 2.65	$ 2.65	$ 2.65	$ 1.75	$ 1.75	$ 1.75	$ 1.75
Dividends declared and paid per share-full year	$ 10.60				$ 7.00			

(1) Includes amortization of acquisition-related intangible assets of $1,301 million.
(2) Includes amortization of acquisition-related intangible assets of $1,303 million.
(3) Includes amortization of acquisition-related intangible assets of $1,299 million.
(4) Includes the results of CA beginning with the fiscal quarter ended February 3, 2019 in connection with the completion of the CA Merger on November 5, 2018. Also includes amortization of acquisition-related intangible assets of $1,309 million and restructuring, impairment and disposal charges of $629 million.
(5) Includes amortization of acquisition-related intangible assets of $829 million and impairment on investment of $106 million.
(6) Includes amortization of acquisition-related intangible assets of $830 million.
(7) Includes amortization of acquisition-related intangible assets of $832 million.
(8) Includes the results of Brocade beginning with the fiscal quarter ended February 4, 2018 in connection with the completion of the Brocade Merger on November 17, 2017. Also includes amortization of acquisition-related intangible assets of $1,054 million, a purchase accounting effect on inventory charge of $70 million and restructuring, impairment and disposal charges of $145 million.
(9) At the beginning of fiscal year 2019, we adopted Topic 606. Periods prior to fiscal year 2019 are presented in accordance with Accounting Standards Codification 605, Revenue Recognition. Refer to Note 3. “Revenue from Contracts with Customers” included in Part II, Item 8. for additional information on our adoption of Topic 606.

Schedule II — Valuation and Qualifying Accounts

	Balance at Beginning of Period	Additions to Allowances	Charges Utilized/ Write-offs	Balance at End of Period
	(In millions)			
Accounts receivable allowances:				
Distributor credit allowances (1)				
Fiscal year ended November 3, 2019	$ 151	$ 705	$ (703)	$ 153
Fiscal year ended November 4, 2018	$ 177	$ 882	$ (908)	$ 151
Fiscal year ended October 29, 2017	$ 252	$ 1,176	$ (1,251)	$ 177
Other accounts receivable allowances (2)				
Fiscal year ended November 3, 2019	$ 12	$ 99	$ (73)	$ 38
Fiscal year ended November 4, 2018	$ 31	$ 116	$ (135)	$ 12
Fiscal year ended October 29, 2017	$ 40	$ 49	$ (58)	$ 31
Income tax valuation allowances				
Fiscal year ended November 3, 2019	$ 1,347	$ 283	$ (68)	$ 1,562
Fiscal year ended November 4, 2018	$ 1,447	$ 314	$ (414)	$ 1,347
Fiscal year ended October 29, 2017	$ 1,003	$ 460	$ (16)	$ 1,447

(1) Distributor credit allowances relate to price adjustments and other allowances.

(2) Other accounts receivable allowances primarily include sales returns and allowance for doubtful accounts.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), evaluated the effectiveness of Broadcom’s disclosure controls and procedures as of November 3, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of November 3, 2019, our CEO and CFO concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by the Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of us are being made only in accordance with authorizations of management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of November 3, 2019. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework* (2013). Based on this assessment, our management concluded that, as of November 3, 2019, our internal control over financial reporting is effective based on those criteria.

Our evaluation of the effectiveness of our internal control over financial reporting as of November 3, 2019 did not include the internal controls of CA, Inc. ("CA"). We excluded CA from our assessment of internal control over financial reporting as of November 3, 2019 because it was acquired in a business combination in November 2018. CA is a subsidiary of ours whose total assets represented 3% and total revenues represented 15% of the related consolidated financial statement amounts as of and for the year ended November 3, 2019.

The effectiveness of our internal control over financial reporting, as of November 3, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included in Part II, Item 8. of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fourth quarter ended November 3, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding our directors, executive officers and compliance with Section 16(a) of the Exchange Act, set forth in the sections entitled "Proposal 1 — Election of Directors," "Executive Officers," "Corporate Governance" and "Section 16(a) Beneficial Ownership Reporting Compliance," in our definitive Proxy Statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of our 2019 fiscal year pursuant to General Instruction G(3) to Form 10-K is hereby incorporated by reference in this section.

We have adopted a written Code of Ethics and Business Conduct that applies to all of our employees and directors, including our principal executive officer, principal financial officer and principal accounting officer, or persons performing similar functions and have posted it in the "Investors Center — Governance" section of our website, which is located at www.broadcom.com. We intend to satisfy any disclosure requirement under Item 5.05 of Form 8-K regarding any amendments to, or waivers from, our Code of Ethics and Business Conduct by posting such information on our website at the internet address and location above.

ITEM 11. EXECUTIVE COMPENSATION

The information regarding executive compensation required by this Item 11 set forth in the sections entitled "Director Compensation", "Compensation Discussion and Analysis," "Executive Compensation," "Compensation Committee Report" and "Corporate Governance — Compensation Committee Interlocks and Insider Participation" in our definitive Proxy Statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of our 2019 fiscal year pursuant to General Instruction G(3) to Form 10-K is hereby incorporated by reference in this section. However, the Compensation Committee Report included in such definitive Proxy Statement shall not be deemed "filed" with the SEC for the purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing made by us with the SEC, regardless of any general incorporation language in such filing.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information regarding security ownership of certain beneficial owners and management and related stockholder matters required by this Item 12 set forth in the section entitled "Security Ownership of Certain Beneficial Owners, Directors and Executive Officers" and "Equity Compensation Plan Information" in our definitive Proxy Statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of our 2019 fiscal year pursuant to General Instruction G(3) to Form 10-K is hereby incorporated by reference in this section.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information regarding certain relationships, related transactions and director independence required by this Item 13 set forth in the sections entitled "Corporate Governance" and "Certain Relationships and Related Party Transactions" in our definitive Proxy Statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of our 2019 fiscal year pursuant to General Instruction G(3) to Form 10-K is hereby incorporated by reference in this section.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information regarding principal accounting fees and services required by this Item 14 set forth in the proposal relating to the re-appointment of our independent registered public accounting firm in our definitive Proxy Statement for our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the end of our 2019 fiscal year pursuant to General Instruction G(3) to Form 10-K is hereby incorporated by reference in this section.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following are filed as part of this Annual Report on Form 10-K:

1. Financial Statements

The following consolidated financial statements are included in Item 8 of this Annual Report on Form 10-K:

2. Financial Statement Schedules

The financial statement schedule of the Registrant and its subsidiaries for fiscal years 2019, 2018 and 2017 required by Item 15(a) (Schedule II, Valuation and Qualifying Accounts) is included in Item 8 of this Annual Report on Form 10-K:

Schedules not filed have been omitted because they are not applicable, are not required or the information required to be set forth therein is included in the financial statements or notes thereto.

3. Exhibits

The documents set forth below are filed herewith or incorporated by reference to the location indicated.

Exhibit No.	Description	Incorporated by Referenced Herein — Form	Incorporated by Referenced Herein — Filing Date	Filed Herewith
2.1#	Agreement and Plan of Merger, dated May 28, 2015, by and among Pavonia Limited, Avago Technologies Limited, Safari Cayman L.P., Avago Technologies Cayman Holdings Ltd., Avago Technologies Cayman Finance Limited, Buffalo CS Merger Sub, Inc., Buffalo UT Merger Sub, Inc. and Broadcom Corporation.	Avago Technologies Limited Current Report on Form 8-K (Commission File No. 001-34428)	May 29, 2015	
2.2	Amendment No. 1 to Agreement and Plan of Merger, dated July 29, 2015, by and between Avago Technologies Limited and Broadcom Corporation.	Avago Technologies Limited Current Report on Form 8-K (Commission File No. 001-34428)	July 31, 2015	
2.3#	Agreement and Plan of Merger, dated November 2, 2016, by and among Brocade Communications Systems, Inc., Broadcom Limited, Broadcom Corporation and Bobcat Merger Sub, Inc.	Broadcom Limited Current Report on Form 8-K/A (Commission File No. 001-37690)	November 2, 2016	
2.4#	Agreement and Plan of Merger, dated as of July 11, 2018, by and among Broadcom, Inc., Collie Acquisition Corp. and CA, Inc.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	July 12, 2018	

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
2.5#	Asset Purchase Agreement, dated as of August 8, 2019, by and between Broadcom Inc. and Symantec Corporation.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	August 9, 2019	
3.1	Amended and Restated Certificate of Incorporation.	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
3.2	Certificate of Designation of the 8.00% Mandatory Convertible Preferred Stock, Series A.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2019	
3.3	Amended and Restated Bylaws.	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
4.1	Form of Common Stock Certificate.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 14, 2018	
4.2	Form of Certificate of the 8.00% Mandatory Convertible Preferred Stock, Series A (included in Exhibit 3.2).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	September 30, 2019	
4.3	Description of Common Stock			X
4.4	Description of 8.00% Mandatory Convertible Preferred Stock, Series A			X
4.5	Indenture, dated as of January 19, 2017, by and among the Broadcom Corporation and Broadcom Cayman Finance Limited ("Co-Issuers"), the Company, Broadcom Cayman L.P., and BC Luxembourg S.à r.l. (the "Guarantors") and Wilmington Trust, National Association, as trustee.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.6	Supplement Indenture to the January 2017 Indenture, dated as of April 9, 2018.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 9, 2018	
4.7	Second Supplement Indenture to the January 2017 Indenture, dated as of January 25, 2019.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	January 25, 2019	
4.8	Form of 2.375% Senior Note due 2020 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.9	Form of 3.000% Senior Note due 2022 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.10	Form of 3.625% Senior Note due 2024 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.11	Form of 3.875% Senior Note due 2027 (included in Exhibit 4.5).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	January 20, 2017	
4.12	Indenture, dated as of October 17, 2017, by and among the Co-Issuers, the Company and Broadcom Cayman L.P., (the "October Guarantors") and Wilmington Trust, National Association, as trustee.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.13	Supplement Indenture to October 2017 Indenture, dated as of April 9, 2018.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	April 9, 2018	
4.14	Second Supplement Indenture to October 2017 Indenture, dated as of January 25, 2019.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-38449)	January 25, 2019	

Exhibit No.	Description	Incorporated by Referenced Herein Form	Filing Date	Filed Herewith
4.15	Form of 2.200% Senior Note due 2021 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.16	Form of 2.650% Senior Note due 2023 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.17	Form of 3.125% Senior Note due 2025 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.18	Form of 3.500% Senior Note due 2028 (included in Exhibit 4.12).	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	October 17, 2017	
4.19	Indenture, dated as of April 5, 2019, by and among the Company, the Guarantors and Wilmington Trust, National Association, as trustee.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.20	Form of 3.125% Senior Note due 2021 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.21	Form of 3.125% Senior Note due 2022 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.22	Form of 3.625% Senior Note due 2024 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.23	Form of 4.250% Senior Note due 2026 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.24	Form of 4.750% Senior Note due 2029 (included in Exhibit 4.19).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
4.25	Registration Rights Agreement, dated as of April 5, 2019, by and among the Company, the Guarantors and Merrill Lynch, Pierce, Fenner & Smith Incorporated and J.P. Morgan Securities LLC, as representatives of the several initial purchasers of the April 2019 Notes.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	April 5, 2019	
10.1	Form of Indemnification and Advancement Agreement (effective April 4, 2018).	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
10.2	Form of Indemnification Agreement (Directors) (effective June 1, 2016).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	June 9, 2016	
10.3	Form of Indemnification Agreement (Officers) (effective June 1, 2016).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	June 9, 2016	
10.4	Form of Indemnification Agreement (Directors) (effective February 1, 2016).	Broadcom Limited Current Report on Form 8-K12B (Commission File No. 001-37690)	February 2, 2016	
10.5	Form of Indemnification Agreement (Directors) (effective prior to February 1, 2016).	Avago Technologies Limited Quarterly Report on Form 10-Q (Commission File No. 001-34428)	September 13, 2013	
10.6	Form of Indemnification Agreement (Officers) (effective prior to February 1, 2016).	Avago Technologies Finance Pte. Ltd. Amendment No. 1 to Annual Report on Form 20-F/A (Commission File No. 333-137664)	February 27, 2008	

Exhibit No.	Description	Incorporated by Referenced Herein Form	Filing Date	Filed Herewith
10.7	Credit Agreement, dated as of May 7, 2019, among Broadcom Inc., the lenders and other parties party thereto, and Bank of America, N.A., as Administrative Agent.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	May 7, 2019	
10.8	Credit Agreement, dated as of November 4, 2019, among Broadcom Inc., the lenders and other parties party thereto, and Bank of America, N.A., as Administrative Agent.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	November 4, 2019	
10.9	Sublease Agreement, dated June 5, 2009, between Agilent Technologies Singapore Pte. Ltd. and Avago Technologies Manufacturing (Singapore) Pte. Ltd., relating to Avago's facility at 1 Yishun Avenue 7, Singapore 768923.	Avago Technologies Limited Registration Annual Report on Form 10-K (Commission File No. 001-33428)	December 15, 2010	
10.10	Amendments of Sublease Agreement between Agilent Technologies Singapore Pte. Ltd. and Avago Technologies Manufacturing (Singapore) Pte. Ltd., relating to Avago's facility at 1 Yishun Avenue 7 Singapore 768923.	Avago Technologies Limited Registration Annual Report on Form 10-K (Commission File No. 001-33428)	December 17, 2015	
10.11	Amendment No. 3 of Sublease Agreement between Agilent Technologies Singapore Pte. Ltd. and Avago Technologies Manufacturing (Singapore) Pte. Ltd., relating to Avago's facility at 1 Yishun Avenue 7 Singapore 768923.	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 10, 2016	
10.12	Lease No. I/33183P issued by Singapore Housing and Development Board to Compaq Asia Pte Ltd in respect of the land and structures comprised in Lot 1935X of Mukim 19, dated September 26, 2000, and includes the Variation of Lease I/49501Q registered January 15, 2002, relating to Avago's facility at 1 Yishun Avenue 7, Singapore 768923.	Avago Technologies Finance Pte. Ltd. Registration Statement on Form F-4 (Commission File No. 333-137664)	November 15, 2006	
10.13	Lease No. I/31607P issued by Singapore Housing and Development Board to Compaq Asia Pte Ltd in respect of the land and structures comprised in Lot 1937C of Mukim 19, dated September 26, 2000, and includes the Variation of Lease I/49499Q registered January 15, 2002, relating to Avago's facility at 1 Yishun Avenue 7, Singapore 768923.	Avago Technologies Finance Pte. Ltd. Registration Statement on Form F-4 (Commission File No. 333-137664)	November 15, 2006	
10.14	Lease No. I/33182P issued by Singapore Housing and Development Board to Compaq Asia Pte Ltd in respect of the land and structures comprised in Lot 2134N of Mukim 19, dated September 26, 2000, and includes the Variation of Lease I/49500Q registered January 15, 2002, relating to Avago's facility at 1 Yishun Avenue 7, Singapore 768923.	Avago Technologies Finance Pte. Ltd. Registration Statement on Form F-4 (Commission File No. 333-137664)	November 15, 2006	
10.15	Lease No. I/33160P issued by Singapore Housing and Development Board to Compaq Asia Pte Ltd in respect of the land and structures comprised in Lot 1975P of Mukim 19, dated September 26, 2000, and includes the Variation of Lease I/49502Q registered January 15, 2002, relating to Avago's facility at 1 Yishun Avenue 7, Singapore 768923.	Avago Technologies Finance Pte. Ltd. Registration Statement on Form F-4 (Commission File No. 333-137664)	November 15, 2006	
10.16	Lease Agreement dated August 10, 2017 between Five Point Office Venture I, LLC and Broadcom Corporation.	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 21, 2017	

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
10.17*	Settlement and Patent License and Non-Assert Agreement by and between Qualcomm Incorporated and Broadcom Corporation.	Broadcom Corporation Current Report on Form 8-K/A (Commission File No. 000-23993)	July 23, 2009	
10.18+	Avago Technologies Limited 2009 Equity Incentive Award Plan.	Avago Technologies Limited Registration Statement on Form S-1 (Commission File No. 333-153127)	July 27, 2009	
10.19+	Second Amended and Restated Employee Stock Purchase Plan.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	February 2, 2016	
10.20+	Amendment to Broadcom Limited Second Amended and Restated Employee Stock Purchase Plan.	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
10.21+	LSI Corporation 2003 Equity Incentive Plan, as amended.	Avago Technologies Limited Registration Statement on Form S-8 (Commission File No. 333-195741)	May 6, 2014	
10.22+	Amendment to the LSI Corporation 2003 Equity Incentive Plan (effective February 1, 2016).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 23, 2016	
10.23+	Amendment to the LSI Corporation 2003 Equity Incentive Plan (effective April 4, 2018).	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
10.24+	Broadcom Corporation 2012 Stock Incentive Plan.	Broadcom Corporation Annual Report on Form 10-K (Commission File No. 000-23993)	January 29, 2015	
10.25+	Amendment to the Broadcom Corporation 2012 Stock Incentive Plan (effective February 1, 2016).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 23, 2016	
10.26+	Amendment to the Broadcom Corporation 2012 Stock Incentive Plan (effective April 4, 2018).	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
10.27+	Broadcom Corporation 1998 Stock Incentive Plan, as amended and restated November 11, 2010.	Broadcom Corporation Annual Report on Form 10-K (Commission File No. 000-23993)	February 2, 2011	
10.28+	Amendment to the Broadcom Corporation 1998 Stock Incentive Plan (effective February 1, 2016).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 23, 2016	
10.29+	Brocade Communication Systems, Inc. 2009 Stock Plan, as amended and restated April 11, 2017.	Brocade Communication Systems, Inc. Current Report on Form 8-K (Commission File No. 000-25601)	April 12, 2017	
10.30+	Amendment to the Brocade Communication Systems, Inc. 2009 Stock Plan (effective November 17, 2017).	Broadcom Limited Registration Statement on Form S-8 (Commission File No. 333-221654)	November 11, 2017	
10.31+	Amendment to the Brocade Communication Systems, Inc. 2009 Stock Plan (effective April 4, 2018).	Broadcom Inc. Current Report on Form 8-12B (Commission File No. 001-38449)	April 4, 2018	
10.32+	Brocade Communications Systems, Inc. Amended and Restated Inducement Award Plan, effective as of May 24, 2016.	Brocade Communication Systems, Inc. Post-Effective Amendment No. 1 to Form S-4 on Form S-8 Registration Statement (Commission File No. 333-211823)	June 3, 2016	
10.33+	Amendment to the Brocade Communication Systems, Inc. Amended and Restated Inducement Award Plan (effective November 17, 2017).	Broadcom Limited Registration Statement on Form S-8 (Commission File No. 333-221654)	November 11, 2017	

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
10.34+	Amendment to the Brocade Communication Systems, Inc. Amended and Restated Inducement Award Plan (effective April 4, 2018).	Broadcom Inc. Current Report on Form 8-K12B (Commission File No. 001-38449)	April 4, 2018	
10.35+	CA, Inc. 2011 Incentive Plan, as amended and restated as of November 5, 2018.	Broadcom Inc. Registration Statement on Form S-8 (Commission File No. 333-228175	November 5, 2018	
10.36+	Form of Annual Bonus Plan for Executive Employees.	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 23, 2016	
10.37+	Form of Option Agreement Under Avago Technologies Limited 2009 Equity Incentive Award Plan.	Amendment No. 5 to Avago Technologies Limited Registration Statement on Form S-1 (Commission File No. 333-153127)	July 27, 2009	
10.38+	Form of Restricted Stock Unit Agreement (Sell to Cover) Under Avago Technologies Limited 2009 Equity Incentive Award Plan.	Avago Technologies Limited Quarterly Report on Form 10-Q (Commission File No. 001-34428)	June 7, 2013	
10.39+	Form of Restricted Stock Unit Agreement (Sell to Cover) Under Avago Technologies Limited 2009 Equity Incentive Award Plan (effective February 1, 2016).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 10, 2016	
10.40+	Form of Restricted Stock Unit Agreement (Sell to Cover) Under Avago Technologies Limited 2009 Equity Incentive Award Plan (effective December 5, 2017).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 21, 2017	
10.41+	Form of Restricted Stock Unit Award Agreement under Avago Technologies Limited 2009 Equity Incentive Plan (effective April 4, 2018).	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-38449)	June 16, 2018	
10.42+	Form of Restricted Stock Unit Award Agreement under Avago Technologies Limited 2009 Equity Incentive Plan (effective December 5, 2018).	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 21, 2018	
10.43+	Form of Agreement for Multi-Year Equity Award of Restricted Stock Unit Award under the Avago Technologies Limited 2009 Equity Incentive Award Plan).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	December 6, 2018	
10.44+	Form of Performance Stock Unit Agreement (Relative TSR) under Avago Technologies Limited 2009 Equity Incentive Award Plan.	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 9, 2017	
10.45+	Form of Performance Share Unit Agreement (Relative TSR) under Avago Technologies Limited 2009 Equity Incentive Plan (effective March 13, 2018).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 15, 2018	
10.46+	Form of Performance Share Unit Agreement (Relative TSR) under Avago Technologies Limited 2009 Equity Incentive Plan (effective April 4, 2018).	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-38449)	June 16, 2018	
10.47+	Form of Performance Stock Unit Agreement (Relative TSR) under Avago Technologies Limited 2009 Equity Incentive Plan (effective December 5, 2018).	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 21, 2018	
10.48+	Form of Agreement for Multi-Year Equity Award of Performance Stock Units under the Avago Technologies Limited 2009 Equity Incentive Award Plan).	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	December 6, 2018	

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
10.49+	Form of Option Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended.	Avago Technologies Limited Registration Statement on Form S-8 (Commission File No. 333-196438)	June 2, 2014	
10.50+	Form of Restricted Stock Unit Award Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended.	Avago Technologies Limited Registration Statement on Form S-8 (Commission File No. 333-196438)	June 2, 2014	
10.51+	Form of Restricted Stock Unit Award Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended (effective February 1, 2016).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 10, 2016	
10.52+	Form of Restricted Stock Unit Award Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended (effective December 5, 2017).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 21, 2017	
10.53+	Form of Restricted Stock Unit Award Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended (effective April 4 2018).	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.54+	Form of Restricted Stock Unit Award Agreement under LSI Corporation 2003 Equity Incentive Plan, as amended (effective December 5, 2018).	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 21, 2018	
10.55+	Broadcom Corporation Amended and Restated Restricted Stock Units Incentive Award Program.	Broadcom Corporation Quarterly Report on Form 10-Q (Commission File No. 000-23993)	April 24, 2014	
10.56+	Amendment to Broadcom Corporation Amended and Restated Restricted Stock Units Incentive Award Program.	Broadcom Corporation Quarterly Report on Form 10-Q (Commission File No. 000-23993)	July 30, 2015	
10.57+	Form of Restricted Stock Unit Issuance Agreement for executive officers under the Broadcom Corporation 2012 Stock Incentive Plan (for RSUs governed by the RSU Incentive Award Program (3 year cliff vesting)).	Broadcom Corporation Annual Report on Form 10-K (Commission File No. 000-23993)	January 30, 2014	
10.58+	Form of Award Letter under the Broadcom Corporation Restricted Stock Units Incentive Award Program.	Broadcom Corporation Quarterly Report on Form 10-Q (Commission File No. 000-23993)	April 24, 2014	
10.59+	Form of Restricted Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan (effective February 1, 2016).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 10, 2016	
10.60+	Form of Restricted Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan (effective December 5, 2017).	Broadcom Limited Annual Report on Form 10-K (Commission File No. 001-37690)	December 21, 2017	
10.61+	Form of Restricted Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan, as amended (effective April 4, 2018).	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.62+	Form of Restricted Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan, as amended (effective December 5, 2018).	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 21, 2018	
10.63+	Form of Restricted Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan, as amended (effective December 6, 2019).			X

Table of Contents

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
10.64+	Form of Agreement for Multi-Year Equity Award of Restricted Stock Units under the Broadcom Corporation 2012 Stock Incentive Plan.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	December 6, 2018	
10.65+	Form of Performance Stock Unit Agreement (Relative TSR) under Broadcom Corporation 2012 Stock Incentive Plan.	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 9, 2017	
10.66+	Form of Performance Share Unit Agreement (Relative TSR) under Broadcom Corporation 2012 Stock Incentive Plan (effective March 15, 2018).	Broadcom Limited Quarterly Report on Form 10-Q (Commission File No. 001-37690)	March 15, 2018	
10.67+	Form of Performance Share Unit Agreement (Relative TSR) under Broadcom Corporation 2012 Stock Incentive Plan (effective April 4, 2018).	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.68+	Form of Performance Stock Unit Agreement (Relative TSR) under Broadcom Corporation 2012 Stock Incentive Plan (effective December 5, 2018).	Broadcom Inc. Annual Report on Form 10-K (Commission File No. 001-38449)	December 21, 2018	
10.69+	Form of Agreement for Multi-Year Equity Award of Performance Stock Units under the Broadcom Corporation 2012 Stock Incentive Plan.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	December 6, 2018	
10.70+	Form of Performance Stock Unit Award Agreement under Broadcom Corporation 2012 Stock Incentive Plan, as amended (effective December 6, 2019).			X
10.71+	Performance Stock Unit Award Agreement, dated June 15, 2016, between Broadcom Limited and Hock E. Tan.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	June 16, 2016	
10.72+	Performance Stock Unit Award Agreement, dated June 15, 2017, between Broadcom Limited and Hock E. Tan.	Broadcom Limited Current Report on Form 8-K (Commission File No. 001-37690)	June 19, 2017	
10.73+	Policy on Acceleration of Executive Staff Equity Awards in the Event of Permanent Disability.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	March 15, 2019	
10.74+	Policy on Acceleration of Equity Awards in the Event of Death.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	March 15, 2019	
10.75+	Severance Benefits Agreement, dated January 23, 2014, between Avago Technologies Limited and Hock E. Tan.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.76+	Severance Benefits Agreement, dated October 17, 2016, between Broadcom Limited and Thomas H. Krause, Jr.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.77+	Severance Benefits Agreement, dated June 3, 2015, between Avago Technologies Limited and Charlie Kawwas.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.78+	Severance Benefits Agreement, dated September 26, 2017, between Broadcom Limited and Mark Brazeal.	Broadcom Inc. Quarterly Report on Form 10-Q (Commission File No. 001-34889)	June 16, 2018	
10.79+	Transition and Separation Agreement, dated as of September 11, 2019, by and between Broadcom Inc. and Bryan T. Ingram.	Broadcom Inc. Current Report on Form 8-K (Commission File No. 001-34889)	September 13, 2019	
10.80+	Continuing Employment Offer Letter, dated June 3, 2015, between Avago Technologies Limited and Charlie Kawwas.	Avago Technologies Limited Quarterly Report on Form 10-Q (Commission File No. 001-34428)	June 10, 2015	

Exhibit No.	Description	Incorporated by Referenced Herein		Filed Herewith
		Form	Filing Date	
21.1	List of Subsidiaries.			X
23.1	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.			X
24.1	Power of Attorney (see signature page to this Form 10-K).			X
31.1	Certification of Principal Executive Officer of Broadcom Inc. Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			X
31.2	Certification of Principal Financial Officer of Broadcom Inc. Pursuant to Rule 13a-14 of the Securities Exchange Act of 1934, As Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.			X
32.1	Certification of Principal Executive Officer of Broadcom Inc. Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X
32.2	Certification of Principal Financial Officer of Broadcom Inc. Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.			X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.			X
101.SCH	XBRL Schema Document			X
101.CAL	XBRL Calculation Linkbase Document			X
101.DEF	XBRL Definition Linkbase Document			X
101.LAB	XBRL Labels Linkbase Document			X
101.PRE	XBRL Presentation Linkbase Document			X
104	Cover Page Interactive Data File - the cover page interactive data file does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.			X

Notes:

\+ Indicates a management contract or compensatory plan or arrangement.

\# Schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Broadcom Inc. hereby undertakes to furnish supplementally copies of any omitted schedules upon request by the SEC.

* Certain information omitted pursuant to a request for confidential treatment filed with the SEC.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BROADCOM INC.

By:		**/s/ Hock E. Tan**
	Name:	**Hock E. Tan**
	Title:	**President and Chief Executive Officer**

Date: December 20, 2019

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Hock E. Tan, Thomas H. Krause, Jr., Mark D. Brazeal and Kirsten M. Spears, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Table of Contents

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant in the capacities indicated and on the dates indicated.

Signature	Title	Date
/s/ Hock E. Tan Hock E. Tan	President and Chief Executive Officer and Director (Principal Executive Officer)	December 20, 2019
/s/ Thomas H. Krause, Jr. Thomas H. Krause, Jr.	Chief Financial Officer (Principal Financial Officer)	December 20, 2019
/s/ Kirsten M. Spears Kirsten M. Spears	Principal Accounting Officer	December 20, 2019
/s/ Henry Samueli Henry Samueli	Chairman of the Board of Directors	December 20, 2019
/s/ Eddy W. Hartenstein Eddy W. Hartenstein	Lead Independent Director	December 20, 2019
/s/ Diane M. Bryant Diane M. Bryant	Director	December 20, 2019
/s/ Gayla J. Delly Gayla J. Delly	Director	December 20, 2019
/s/ Check Kian Low Check Kian Low	Director	December 20, 2019
/s/ Peter J. Marks Peter J. Marks	Director	December 20, 2019
/s/ Justine F. Page Justine F. Page	Director	December 20, 2019
/s/ Harry L. You Harry L. You	Director	December 20, 2019

DESCRIPTION OF BROADCOM INC. COMMON STOCK

The following description of Broadcom Inc.'s common stock is a summary. This summary is subject to the General Corporation Law of the State of Delaware (the "**DGCL**") and the complete text of Broadcom Inc.'s amended and restated certificate of incorporation (the "**certificate of incorporation**") and amended and restated bylaws (the "**bylaws**") filed as Exhibits 3.1 and 3.3, respectively, to its Annual Report on Form 10-K. We encourage you to read that law and those documents carefully.

Common Stock

General

The certificate of incorporation authorizes 2,900,000,000 shares of common stock, $0.001 par value per share.

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Common stockholders do not have cumulative voting rights in the election of directors. Accordingly, in an uncontested election, holders of a majority of the voting shares are able to elect all of the directors.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. Dividends may be paid in cash, in property or in shares of common stock. Declaration and payment of any dividend are subject to the discretion of the board of directors. The time and amount of dividends is dependent upon our financial condition, operations, cash requirements and availability, debt repayment obligations, capital expenditure needs, restrictions in our debt instruments, industry trends, the provisions of Delaware law affecting the payment of distributions to stockholders and any other factors the board of directors may consider relevant.

Liquidation

In the event of Broadcom's liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All outstanding shares of common stock are fully paid and non-assessable.

Annual Stockholder Meetings

The certificate of incorporation and bylaws provides that annual stockholder meetings will be held at a date, place (if any) and time, as exclusively selected by the board of directors. To the extent permitted under applicable law, we may but are not obligated to conduct meetings by remote communications, including by webcast.

Anti-Takeover Effects of Provisions

Some provisions of Delaware law and the certificate of incorporation and bylaws could make the following transactions difficult: acquisition by means of a tender offer; acquisition by means of a proxy contest or otherwise; or removal of incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in the best interests of Broadcom, including transactions that might result in a premium over the market price for shares of common stock.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control to first negotiate with Broadcom's board of directors. We believe that the benefits of protection to Broadcom's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure Broadcom outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

Section 203 of the DGCL prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock and a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock will make it possible for the board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of Broadcom. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our Company.

Special Stockholder Meetings

The bylaws provide that a special meeting of stockholders may be called only by the board of directors or by two or more common stockholders holding at least 10% of the total number of issued and outstanding shares of Broadcom.

Requirements for Advance Notification of Stockholder Nominations and Proposals

The bylaws sets forth advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

No Stockholder Action by Written Consent

The certificate of incorporation and bylaws do not provide for the right of stockholders to act by written consent without a meeting.

Composition of the Board of Directors; Election and Removal of Directors; Filling Vacancies

The board of directors may consist of not less than one nor more than 13 directors. In any uncontested elections of directors, a director nominee for the board of directors will be elected by the affirmative vote of a majority of the votes cast with respect to such director by the shares represented and entitled to vote at a meeting of the stockholders for the election of directors at which a quorum is present, voting together as a single class. An incumbent director who is nominated for an uncontested election and fails to receive a majority of the votes present and voting for such director's reelection would be required to tender his or her resignation to the board of directors. The Nominating and Corporate Governance Committee of the board of directors (or any future committee the equivalent thereof) will make a recommendation to the board of directors on whether to accept or reject the resignation, or whether other action should be taken. The board of directors will act on the recommendation of such committee and will publicly disclose its decision within 90 days from the date of the certification of the election results. In a contested election, a plurality voting standard will apply to director elections. The directors are elected until the expiration of the term for which they are elected and until their respective successors are duly elected and qualified.

The directors may be removed only by the affirmative vote of at least a majority of the holders of our then-outstanding common stock. Furthermore, any vacancy on the board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may be filled only by a majority vote of the board of directors then in office, even if less than a quorum, or by the sole remaining director. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of Broadcom, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Choice of Forum

The certificate of incorporation and bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, the Broadcom certificate of incorporation or bylaws; or any action asserting a claim against Broadcom that is governed by the internal affairs doctrine. Although the Broadcom certificate of incorporation contains the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Amendment of the Certificate of Incorporation and Bylaws

The amendment of any of the provisions in the certificate of incorporation requires approval by a stockholder vote by the holders of at least a majority of the voting power of the then outstanding voting stock. The bylaws may be amended by the board of directors or by the holders of at least a majority of the voting power of the then outstanding voting stock.

The provisions of the DGCL, the certificate of incorporation and bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the management of Broadcom. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Limitations of Liability and Indemnification Matters

The certificate of incorporation contains provisions that limit the liability of the directors and officers for monetary damages to the fullest extent permitted by Delaware law. Consequently, directors and officers are not personally liable to the Company or its stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's or officer's duty of loyalty to the Company or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director or officer derived an improper personal benefit.

Each of the certificate of incorporation and bylaws provides that we are required to indemnify the directors and officers, in each case to the fullest extent permitted by Delaware law. The bylaws also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or

proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered into agreements to indemnify the directors, executive officers and other employees as determined by the board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding to the fullest extent permitted by applicable law. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. Broadcom also maintains directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in the certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against the directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against the directors and officers, even though an action, if successful, might benefit the Company and its stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

Uncertificated Shares

Holders of shares of common stock of Broadcom do not have the right to require Broadcom to issue certificates for their shares. Broadcom only issues uncertificated shares of common stock.

Stock Exchange Listing

Shares of common stock are listed on NASDAQ under the symbol "AVGO".

No Sinking Fund

The shares of common stock have no sinking fund provisions.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, Massachusetts 02021.

DESCRIPTION OF MANDATORY CONVERTIBLE PREFERRED STOCK

The following is a description of certain provisions of our 8.00% Mandatory Convertible Preferred Stock, Series A, which we refer to as our "Mandatory Convertible Preferred Stock." A copy of the certificate of designations setting forth the terms of the Mandatory Convertible Preferred Stock, which we refer to as the "Certificate of Designations," is filed as Exhibit 3.2 to our Annual Report on Form 10-K. This summary of the terms of the Mandatory Convertible Preferred Stock is not complete and is subject to, and qualified in its entirety by reference to, the provisions of our Amended and Restated Certificate of Incorporation ("Charter") and the Certificate of Designations.

As used in this section, unless otherwise expressly stated or the context otherwise requires, the terms "Broadcom Inc.," "the Company," "us," "we" or "our" refer to Broadcom Inc. and not any of its subsidiaries or affiliates.

General

The Mandatory Convertible Preferred Stock are, and any common stock issued upon the conversion of the Mandatory Convertible Preferred Stock will be, fully paid and nonassessable. The holders of the Mandatory Convertible Preferred Stock have no preemptive or preferential rights to purchase or subscribe for stock, obligations, warrants or other securities of ours of any class. Computershare Trust Company, N.A. serves as the transfer agent and registrar of our common stock and as transfer agent, registrar and conversion and dividend disbursing agent for the Mandatory Convertible Preferred Stock.

Ranking

The Mandatory Convertible Preferred Stock, with respect to dividend rights and distribution rights upon our liquidation, winding-up or dissolution, rank:

- senior to (i) our common stock and (ii) each other class or series of our capital stock established after the first original issue date of shares of the Mandatory Convertible Preferred Stock (which we refer to as the "Initial Issue Date") the terms of which do not expressly provide that such class or series ranks senior to or on parity with the Mandatory Convertible Preferred Stock as to dividend rights and distribution rights upon our liquidation, winding-up or dissolution (we refer to our common stock and all such other classes or series of capital stock, collectively, as "Junior Stock");

- on parity with each class or series of our capital stock established after the Initial Issue Date the terms of which expressly provide that such class or series will rank on parity with the Mandatory Convertible Preferred Stock as to dividend rights and distribution rights upon our liquidation, winding-up or dissolution (which we refer to collectively as "Parity Stock");

- junior to each class or series of our capital stock established after the Initial Issue Date the terms of which expressly provide that such class or series will rank senior to the Mandatory Convertible Preferred Stock as to dividend rights and distribution rights upon our liquidation, winding-up or dissolution (which we refer to collectively as "Senior Stock");

- junior to our existing and future indebtedness and other liabilities; and

- structurally subordinated to any existing and future indebtedness and other liabilities of our subsidiaries and capital stock of our subsidiaries held by third parties.

Listing

The Mandatory Convertible Preferred Stock is listed on The Nasdaq Global Select Market under the symbol "AVGOP".

Dividends

Subject to the rights of holders of any class or series of our capital stock ranking senior to the Mandatory Convertible Preferred Stock with respect to dividends, holders of the Mandatory Convertible Preferred Stock are entitled to receive, when, as and if declared by our board of directors, or an authorized committee thereof, out of funds legally available for payment, cumulative dividends at the rate per annum of 8.00% of the Liquidation Preference (as defined below) of $1,000 per share of the Mandatory Convertible Preferred Stock (equivalent to $80.00 per annum per share), payable in cash, by delivery of shares of our common stock or by delivery of any combination of cash and shares of our common stock, as determined by us in our sole discretion (subject to the limitations described below). See "—Method of Payment of Dividends" below. Declared dividends on the Mandatory Convertible Preferred Stock are payable quarterly on March 31, June 30, September 30 and December 31 of each year, commencing on December 31, 2019, to, and including, September 30, 2022 (each, a "Dividend Payment Date"), at such annual rate, and dividends shall accumulate from the most recent date as to which dividends shall have been paid or, if no dividends have been paid, from the Initial Issue Date of the Mandatory Convertible Preferred Stock, whether or not in any dividend period or periods there have been funds legally available for the payment of such dividends. Declared dividends are payable on the relevant Dividend Payment Date to holders of record of the Mandatory Convertible Preferred Stock as they appear on our stock register at the Close of Business on the immediately preceding March 15, June 15, September 15 or December 15, respectively (each, a "Record Date"), whether or not such holders convert their shares, or such shares are automatically converted, after a Record Date and on or prior to the immediately succeeding Dividend Payment Date. These Record Dates apply regardless of whether a particular Record Date is a Business Day. A "Business Day" means any day other than a Saturday or Sunday or any other day on which commercial banks in New York City are authorized or required by law or executive order to close. If a Dividend Payment Date is not a Business Day, payment will be made on the next succeeding Business Day, without any interest or other payment in lieu of interest accruing with respect to this delay.

A dividend period is the period from, and including, a Dividend Payment Date to, but excluding, the next Dividend Payment Date, except that the initial dividend period will commence on, and include, the Initial Issue Date of the Mandatory Convertible Preferred Stock and will end on, and exclude, the December 31, 2019 Dividend Payment Date. The amount of dividends payable on each share of the Mandatory Convertible Preferred Stock for each full dividend period (after the initial dividend period) will be computed by dividing the annual dividend rate by four. Dividends payable on the Mandatory Convertible Preferred Stock for any period other than a full dividend period will be computed based upon the actual number of days elapsed during such period over a 360-day year (consisting of twelve 30-day months). Accumulations of dividends on shares of the Mandatory Convertible Preferred Stock will not bear interest.

No dividend will be declared or paid upon, or any sum of cash or number of shares of our common stock set apart for the payment of dividends upon, any outstanding shares of Mandatory Convertible Preferred Stock with respect to any dividend period unless all dividends for all preceding dividend periods have been declared and paid upon, or a sufficient sum of cash or number of shares of our common stock has been set apart for the payment of such dividends upon, all outstanding shares of Mandatory Convertible Preferred Stock.

Except as described above, dividends on shares of Mandatory Convertible Preferred Stock converted to common stock will cease to accumulate, and all other rights of holders of the Mandatory Convertible Preferred Stock will terminate, from and after the Mandatory Conversion Date, the Fundamental Change Conversion Date or the Early Conversion Date (each, as defined below), as applicable.

So long as any share of Mandatory Convertible Preferred Stock remains outstanding, no dividend or distribution shall be declared or paid on our common stock or any other class or series of Junior Stock, and no common stock or

any other Junior Stock shall be purchased, redeemed or otherwise acquired for consideration by us or any of our subsidiaries unless, in each case, all accumulated and unpaid dividends for all preceding dividend periods have been declared and paid, or a sufficient sum of cash or number of shares of our common stock has been set apart for the payment of such dividends, on all outstanding shares of Mandatory Convertible Preferred Stock. The foregoing limitation shall not apply to: (i) any dividend or distribution payable in shares of common stock or other Junior Stock, together with cash in lieu of any fractional share, (ii) purchases, redemptions or other acquisitions of common stock or other Junior Stock in connection with the administration of any benefit or other incentive plan, including any employment contract, in the ordinary course of business, including, without limitation, (x) purchases to offset the Share Dilution Amount (as defined below) pursuant to a publicly announced repurchase plan, *provided* that any purchases to offset the Share Dilution Amount shall in no event exceed the Share Dilution Amount, (y) the forfeiture of unvested shares of restricted stock or share withholdings or other surrender of shares to which the holder may otherwise be entitled upon exercise, delivery or vesting of equity awards (whether in payment of applicable taxes, the exercise price or otherwise), and (z) the payment of cash in lieu of fractional shares; (iii) purchases of fractional interests in shares of any common stock or other Junior Stock pursuant to the conversion or exchange provisions of such shares of other Junior Stock or any securities exchangeable for or convertible into shares of common stock or other Junior Stock; (iv) any dividends or distributions of rights or common stock or other Junior Stock in connection with a stockholders' rights plan or any redemption or repurchase of rights pursuant to any stockholders' rights plan; (v) purchases of common stock or other Junior Stock pursuant to a contractually binding requirement to buy common stock or other Junior Stock existing prior to the preceding dividend period, including under a contractually binding stock repurchase plan; (vi) the deemed purchase or acquisition of fractional interests in shares of our common stock or other Junior Stock pursuant to the conversion or exchange provisions of such shares or the security being converted or exchanged; (vii) the acquisition by us or any of our subsidiaries of record ownership in common stock or other Junior Stock or Parity Stock for the beneficial ownership of any other persons (other than us or any of our subsidiaries), including as trustees or custodians, and the payment of cash in lieu of fractional shares and (viii) the exchange or conversion of Junior Stock for or into other Junior Stock or of Parity Stock for or into other Parity Stock (with the same or lesser aggregate liquidation amount) or Junior Stock and the payment of cash in lieu of fractional shares. The phrase "Share Dilution Amount" means the increase in the number of diluted shares outstanding (determined in accordance with accounting principles generally accepted in the United States of America and as measured from the Initial Issue Date) resulting from the grant, vesting or exercise of equity-based compensation to directors, employees, contractors and agents and equitably adjusted for any stock split, stock dividend, reverse stock split, reclassification or similar transaction.

When dividends on shares of the Mandatory Convertible Preferred Stock (i) have not been declared and paid in full on any Dividend Payment Date, or (ii) have been declared but a sum of cash or number of shares of our common stock sufficient for payment thereof has not been set aside for the benefit of the holders thereof on the applicable Record Date, no dividends may be declared or paid on any Parity Stock unless dividends are declared on the shares of Mandatory Convertible Preferred Stock such that the respective amounts of such dividends declared on the shares of Mandatory Convertible Preferred Stock and such Parity Stock shall bear the same ratio to each other as all accumulated dividends and all declared and unpaid dividends per share on the shares of Mandatory Convertible Preferred Stock and such Parity Stock bear to each other; *provided*, *however*, that any unpaid dividends will continue to accumulate.

Subject to the foregoing, and not otherwise, such dividends (payable in cash, securities or other property) as may be determined by our board of directors, or an authorized committee thereof, may be declared and paid on any securities, including our common stock, from time to time out of any funds legally available for such payment, and holders of the Mandatory Convertible Preferred Stock shall not be entitled to participate in any such dividends.

Method of Payment of Dividends

Subject to the limitations described below, we may pay any declared dividend (or any portion of any declared dividend) on the shares of Mandatory Convertible Preferred Stock (whether for a current dividend period or any prior dividend period, including in connection with the payment of declared and unpaid dividends pursuant to the provisions described in "—Mandatory Conversion" and "—Conversion at the Option of the Holder upon Fundamental Change; Fundamental Change Dividend Make-Whole Amount"), determined in our sole discretion:

- in cash;
- by delivery of shares of our common stock; or
- by delivery of any combination of cash and shares of our common stock.

We will make each payment of a declared dividend on the shares of Mandatory Convertible Preferred Stock in cash, except to the extent we elect to make all or any portion of such payment in shares of our common stock. We will give the holders of the Mandatory Convertible Preferred Stock notice of any such election and the portions of such payment that will be made in cash and in shares of our common stock no later than 10 Scheduled Trading Days (as defined below) prior to the Dividend Payment Date for such dividend; *provided*, *however*, that if we do not provide timely notice of this election, we will be deemed to have elected to pay the relevant dividend in cash. All cash payments to which a holder of the Mandatory Convertible Preferred Stock is entitled in connection with a dividend will be rounded to the nearest cent.

If we elect to make any such payment of a declared dividend, or any portion thereof, in shares of our common stock, such shares will be valued for such purpose at 97% of the Average VWAP (as defined below) per share of our common stock over the five consecutive Trading Day (as defined below) period beginning on, and including, the sixth Scheduled Trading Day prior to the applicable Dividend Payment Date (such average, the "Average Price"). If the five Trading Day period to determine the Average Price ends on or after the relevant Dividend Payment Date (whether because a Scheduled Trading Day is not a Trading Day due to the occurrence of a Market Disruption Event (as defined herein) or otherwise), then the Dividend Payment Date will be postponed until the Business Day after the final Trading Day of such five Trading Day period. No interest or other amount will accrue as a result of such postponement.

No fractional shares of our common stock will be delivered to the holders of the Mandatory Convertible Preferred Stock in payment or partial payment of a dividend. We will instead, to the extent we are legally permitted to do so and not prohibited by our indebtedness, pay a cash amount to each holder that would otherwise be entitled to receive a fraction of a share of our common stock based on the Average Price with respect to such dividend.

To the extent a shelf registration statement is required in our reasonable judgment in connection with the issuance of, or for resales of, shares of our common stock issued as payment of a dividend on the shares of Mandatory Convertible Preferred Stock, including dividends paid in connection with a conversion, we will, to the extent such a shelf registration statement is not currently filed and effective, use our commercially reasonable efforts to file and maintain the effectiveness of such a shelf registration statement until the earlier of such time as all such shares of common stock have been resold thereunder and such time as all such shares would be freely tradable without registration by holders thereof that are not (and were not at any time during the preceding three months) "affiliates" of ours for purposes of the Securities Act and the rules and regulations thereunder. To the extent applicable, we will also use our commercially reasonable efforts to have the shares of our common stock qualified or registered under applicable U.S. state securities laws, if required, and approved for listing on The Nasdaq Global Select Market (or if our common stock is not listed on The Nasdaq Global Select Market, on the principal other U.S. national or regional securities exchange on which our common stock is then listed).

Notwithstanding the foregoing, in no event will the number of shares of our common stock to be delivered per share of the Mandatory Convertible Preferred Stock in connection with any declared dividend, including any declared dividend payable in connection with a conversion, exceed a number equal to the total dividend payment per share of the Mandatory Convertible Preferred Stock divided by the Floor Price (as defined below).

To the extent that the amount of any declared dividend exceeds the product of (x) the number of shares of our common stock delivered in connection with such dividend and (y) 97% of the Average Price applicable to such

dividend, we will, to the extent we are legally able to do so, and to the extent permitted under the terms of our indebtedness, pay such excess amount in cash.

The "Floor Price" means, as of any time, an amount (rounded to the nearest cent) equal to 35% of the Initial Price (as defined below) in effect as of such time. The initial Floor Price is $98.81.

No Redemption

The Mandatory Convertible Preferred Stock will not be redeemable at our election before the Mandatory Conversion Date.

Liquidation Preference

In the event of our voluntary or involuntary liquidation, winding-up or dissolution, each holder of the Mandatory Convertible Preferred Stock is entitled to receive a Liquidation Preference in the amount of $1,000 per share of the Mandatory Convertible Preferred Stock (the "Liquidation Preference"), plus an amount (the "Liquidation Dividend Amount") equal to accumulated and unpaid dividends on such shares, whether or not declared, to, but excluding, the date fixed for liquidation, winding-up or dissolution to be paid out of our assets legally available for distribution to our stockholders, after satisfaction of debt and other liabilities owed to our creditors and holders of shares of any Senior Stock and before any payment or distribution is made to holders of Junior Stock (including our common stock). If, upon our voluntary or involuntary liquidation, winding-up or dissolution, the amounts payable with respect to (1) the Liquidation Preference plus the Liquidation Dividend Amount on the shares of Mandatory Convertible Preferred Stock and (2) the liquidation preference of, and the amount of accumulated and unpaid dividends (to, but excluding, the date fixed for liquidation, winding-up or dissolution) on all other Parity Stock are not paid in full, the holders of the Mandatory Convertible Preferred Stock and all holders of any such other Parity Stock will share equally and ratably in any distribution of our assets in proportion to their liquidation preference and amounts equal to accumulated and unpaid dividends to which they are entitled. After payment to any holder of Mandatory Convertible Preferred Stock of the full amount of the Liquidation Preference and the Liquidation Dividend Amount for such holder's shares of Mandatory Convertible Preferred Stock, such holder of the Mandatory Convertible Preferred Stock will have no right or claim to any of our remaining assets.

Neither the sale, lease nor exchange of all or substantially all of our assets, nor our merger or consolidation into or with any other person, will be deemed to be our voluntary or involuntary liquidation, winding-up or dissolution.

Our Charter, including the Certificate of Designations for the Mandatory Convertible Preferred Stock, does not contain any provision requiring funds to be set aside to protect the Liquidation Preference of the Mandatory Convertible Preferred Stock.

Voting Rights

The holders of the Mandatory Convertible Preferred Stock do not have any voting rights, except as described below and as specifically required by Delaware law from time to time.

Whenever dividends on any shares of the Mandatory Convertible Preferred Stock (i) have not been declared and paid, or (ii) have been declared but a sum of cash or number of shares of our common stock sufficient for payment thereof has not been set aside for the benefit of the holders thereof on the applicable Record Date, for the equivalent of six or more dividend periods (including, for the avoidance of doubt, the initial dividend period beginning on, and including, the Initial Issue Date), whether or not for consecutive dividend periods (a "Nonpayment"), the authorized number of directors on our board of directors will, at the next annual meeting of stockholders or at a special meeting of stockholders as provided below, automatically be increased by two and the holders of the Mandatory Convertible Preferred Stock, voting together as a single class with holders of any and all other series of Voting Preferred Stock (as defined below) then outstanding, will be entitled, at our next annual meeting or at a special meeting of stockholders, if any, to fill such newly created directorships by electing two additional directors (the "Preferred Stock Directors"); *provided*, *however*, that the election of any such Preferred Stock Directors will not cause us to

violate the corporate governance requirements of The Nasdaq Global Select Market (or any other exchange or automated quotation system on which our securities may be listed or quoted) for listed or quoted companies to have a majority of independent directors; and *provided*, *further*, that our board of directors shall, at no time, include more than two Preferred Stock Directors. In the event of a Nonpayment, the holders of record of at least 25% of the shares of the Mandatory Convertible Preferred Stock and any other series of Voting Preferred Stock may request that a special meeting of stockholders be called to elect such Preferred Stock Directors (*provided*, *however*, that if our next annual or a special meeting of stockholders is scheduled to be held within 90 days of the receipt of such request, the election of such Preferred Stock Directors, to the extent otherwise permitted by our amended and restated bylaws, will, instead, be included in the agenda for and will be held at such scheduled annual or special meeting of stockholders). The Preferred Stock Directors will stand for reelection annually, and at each subsequent annual meeting of the stockholders, so long as the holders of the Mandatory Convertible Preferred Stock continue to have such voting rights.

At any meeting at which the holders of the Mandatory Convertible Preferred Stock are entitled to elect Preferred Stock Directors, the holders of record of a majority of the then outstanding shares of the Mandatory Convertible Preferred Stock and all other series of Voting Preferred Stock, present in person or represented by proxy, will constitute a quorum and the vote of the holders of a majority of such shares of the Mandatory Convertible Preferred Stock and other Voting Preferred Stock so present or represented by proxy at any such meeting at which there shall be a quorum shall be sufficient to elect the Preferred Stock Directors.

"Voting Preferred Stock" means any series of our preferred stock, other than the Mandatory Convertible Preferred Stock, ranking equally with the Mandatory Convertible Preferred Stock either as to dividends or to the distribution of assets upon liquidation, dissolution or winding-up and upon which like voting rights for the election of directors have been conferred and are exercisable. Whether a plurality, majority or other portion in voting power of the Mandatory Convertible Preferred Stock and any other Voting Preferred Stock have been voted in favor of any matter shall be determined by reference to the respective Liquidation Preference amounts of the Mandatory Convertible Preferred Stock and such other Voting Preferred Stock voted.

If and when all accumulated and unpaid dividends on the Mandatory Convertible Preferred Stock have been paid in full (a "Nonpayment Remedy"), the holders of the Mandatory Convertible Preferred Stock shall immediately and, without any further action by us, be divested of the foregoing voting rights, subject to the revesting of such rights in the event of each subsequent Nonpayment. If such voting rights for the holders of the Mandatory Convertible Preferred Stock and all other holders of Voting Preferred Stock have terminated, the term of office of each Preferred Stock Director so elected will terminate at such time and the authorized number of directors on our board of directors shall automatically decrease by two.

Any Preferred Stock Director may be removed at any time, with cause as provided by law or without cause by the holders of record of a majority in voting power of the outstanding shares of the Mandatory Convertible Preferred Stock and any other series of Voting Preferred Stock then outstanding (voting together as a single class), when they have the voting rights described above. In the event that a Nonpayment shall have occurred and there shall not have been a Nonpayment Remedy, any vacancy in the office of a Preferred Stock Director (other than prior to the initial election of Preferred Stock Directors after a Nonpayment) may be filled by the written consent of the Preferred Stock Director remaining in office or, if none remains in office, by a vote of the holders of record of a majority in voting power of the outstanding shares of the Mandatory Convertible Preferred Stock and any other series of Voting Preferred Stock then outstanding (voting together as a single class) when they have the voting rights described above; *provided, however*, that the filling of each vacancy will not cause us to violate the corporate governance requirements of The Nasdaq Global Select Market (or any other exchange or automated quotation system on which our securities may be listed or quoted) for listed or quoted companies to have a majority of independent directors. The Preferred Stock Directors will each be entitled to one vote per director on any matter that comes before our board of directors for a vote.

So long as any shares of the Mandatory Convertible Preferred Stock are outstanding, we will not, without the affirmative vote or consent of the holders of at least two-thirds of the outstanding shares of the Mandatory Convertible Preferred Stock and all other series of Voting Preferred Stock at the time outstanding and entitled to vote

---

thereon, voting together as a single class, given in person or by proxy, either in writing or by vote at an annual or special meeting of such stockholders:

(1) amend or alter the provisions of our Charter or the Certificate of Designations for the Mandatory Convertible Preferred Stock so as to authorize or create, or increase the authorized amount of, any class or series of Senior Stock;

(2) amend, alter or repeal any provision of our Charter or the Certificate of Designations for the Mandatory Convertible Preferred Stock so as to adversely affect the special rights, preferences, privileges or voting powers of the Mandatory Convertible Preferred Stock; or

(3) consummate a binding share exchange or reclassification involving the shares of the Mandatory Convertible Preferred Stock, or a merger or consolidation of us with another entity, unless in each case: (i) the shares of the Mandatory Convertible Preferred Stock remain outstanding or, in the case of any such merger or consolidation with respect to which we are not the surviving or resulting entity (or the Mandatory Convertible Preferred Stock is otherwise exchanged or reclassified), are converted or reclassified into or exchanged for preferred stock of the surviving or resulting entity or its ultimate parent; and (ii) the shares of the Mandatory Convertible Preferred Stock that remain outstanding or

such shares of preferred stock, as the case may be, have rights, preferences, privileges and voting powers that, taken as a whole, are not materially less favorable to the holders thereof than the rights, preferences, privileges and voting powers, taken as a whole, of the Mandatory Convertible Preferred Stock immediately prior to the consummation of such transaction;

provided, *however*, that (1) any increase in the amount of our authorized but unissued shares of our preferred stock, (2) any increase in the amount of our authorized Mandatory Convertible Preferred Stock or the issuance of any additional shares of the Mandatory Convertible Preferred Stock or (3) the authorization or creation of any class or series of Parity Stock or Junior Stock, any increase in the amount of authorized but unissued shares of such class or series of parity or Junior Stock or the issuance of any shares of such class or series of Parity Stock or Junior Stock will be deemed not to adversely affect (or to otherwise cause to be materially less favorable) the rights, preferences, privileges or voting powers of the Mandatory Convertible Preferred Stock and shall not require the affirmative vote of holders of the Mandatory Convertible Preferred Stock. Our Charter and Delaware law permit us, without the approval of any of our stockholders (including any holders of the Mandatory Convertible Preferred Stock), to establish and issue a new series of preferred stock ranking equal with or junior to the Mandatory Convertible Preferred Stock, which may dilute the voting and other interests of holders of the Mandatory Convertible Preferred Stock.

If any amendment, alteration, repeal, share exchange, reclassification, merger or consolidation described above would adversely affect one or more but not all series of Voting Preferred Stock, then only the series of Voting Preferred Stock adversely affected and entitled to vote shall vote as a class in lieu of all other series of Voting Preferred Stock.

Without the consent of the holders of the Mandatory Convertible Preferred Stock, so long as such action does not adversely affect the special rights, preferences, privileges or voting powers of the Mandatory Convertible Preferred Stock, and limitations and restrictions thereof, we may amend, alter, supplement or repeal any terms of the Mandatory Convertible Preferred Stock for the following purposes:

- to cure any ambiguity, omission or mistake, or to correct or supplement any provision contained in the Certificate of Designations establishing the terms of the Mandatory Convertible Preferred Stock that may be defective or inconsistent with any other provision contained in such Certificate of Designations;

- to make any provision with respect to matters or questions relating to the Mandatory Convertible Preferred Stock that is not inconsistent with the provisions of our Charter or the Certificate of Designations establishing the terms of the Mandatory Convertible Preferred Stock; or

- to make any other change that does not adversely affect the rights of any holder of the Mandatory Convertible Preferred Stock (other than any holder that consents to such change).

In addition, without the consent of the holders of the Mandatory Convertible Preferred Stock, we may amend, alter, supplement or repeal any terms of the Mandatory Convertible Preferred Stock in order to conform the terms thereof to the description of the terms of the Mandatory Convertible Preferred Stock set forth under "Description of Mandatory Convertible Preferred Stock" in the preliminary prospectus supplement related to the offering of the Mandatory Convertible Preferred Stock, as supplemented and/or amended by any related pricing term sheet.

Mandatory Conversion

Each share of the Mandatory Convertible Preferred Stock, unless previously converted, will automatically convert on the Mandatory Conversion Date, into a number of shares of our common stock equal to the Conversion Rate described below. If we declare a dividend on the Mandatory Convertible Preferred Stock for the dividend period ending on September 30, 2022, we will pay such dividend to the holders of record as of the Close of Business on the immediately preceding Record Date, as described above under "—Dividends." If, on or prior to September 15, 2022 we have not declared all or any portion of the accumulated dividends on the Mandatory Convertible Preferred Stock, the Conversion Rate will be increased by a number of shares of our common stock equal to the amount of such undeclared, accumulated and unpaid dividends per share of Mandatory Convertible Preferred Stock (the "Additional Conversion Amount") divided by the greater of (x) the Floor Price and (y) 97% of the Average Price. To the extent that the Additional Conversion Amount per share of Mandatory Convertible Preferred Stock exceeds the product of such number of additional shares and 97% of the Average Price, we will, if we are legally able to do so, and to the extent permitted under the terms of our indebtedness, declare and pay such excess amount in cash pro rata per share to the holders of the Mandatory Convertible Preferred Stock.

The "Conversion Rate," which is the number of shares of our common stock issuable upon conversion of each share of the Mandatory Convertible Preferred Stock on the Mandatory Conversion Date, will, subject to adjustment as described above for any Additional Conversion Amount or as described in "—Anti-Dilution Adjustments" below, be as follows:

- if the Applicable Market Value (as defined below) of our common stock is greater than the Threshold Appreciation Price (as defined below), then the Conversion Rate will be 3.0303 shares of our common stock per share of the Mandatory Convertible Preferred Stock (the "Minimum Conversion Rate," subject to adjustment as described below under the caption "—Anti-Dilution Adjustments");

- if the Applicable Market Value of our common stock is less than or equal to the Threshold Appreciation Price but greater than or equal to the Initial Price (as defined below), then the Conversion Rate will be equal to $1,000 divided by the Applicable Market Value of our common stock, which will be between 3.0303 and 3.5422 shares of our common stock per share of the Mandatory Convertible Preferred Stock; or

- if the Applicable Market Value of our common stock is less than the Initial Price, then the Conversion Rate will be 3.5422 shares of our common stock per share of the Mandatory Convertible Preferred Stock (the "Maximum Conversion Rate," subject to adjustment as described below under the caption "—Anti-Dilution Adjustments").

"Threshold Appreciation Price" means, as of any time, an amount (rounded to the nearest cent) equal to $1,000 divided by the Minimum Conversion Rate in effect as of such time. The initial Threshold Appreciation Price is $330.00, which represents a premium of approximately 16.9% over the initial Initial Price.

“Initial Price” means, as of any time, an amount (rounded to the nearest cent) equal to $1,000 divided by the Maximum Conversion Rate in effect as of such time. The Initial Price on the Initial Issue Date is $282.31.

For the avoidance of doubt, the Conversion Rate per share of the Mandatory Convertible Preferred Stock will in no event exceed the Maximum Conversion Rate, subject to adjustment as described under “—Anti-Dilution Adjustments” below and exclusive of any amounts owing in respect of any Additional Conversion Amount or any accrued and unpaid dividends paid at our election in shares of common stock.

We refer to the Minimum Conversion Rate and the Maximum Conversion Rate collectively as the “Fixed Conversion Rates.” The Fixed Conversion Rates, the Initial Price, the Threshold Appreciation Price and the Applicable Market Value are each subject to adjustment as described under “—Anti-Dilution Adjustments” below.

Certain Definitions

“Applicable Market Value” means the Average VWAP per share of our common stock over the Settlement Period (as defined below).

“Close of Business” means 5:00 p.m., New York City time.

“Mandatory Conversion Date” means the second Business Day immediately following the last Trading Day of the Settlement Period. The Mandatory Conversion Date is expected to be September 30, 2022. If the 20 consecutive Trading Day period to determine the Applicable Market Value ends on or after the Trading Day prior to September 30, 2022 (whether because a Scheduled Trading Day is not a Trading Day due to the occurrence of a Market Disruption Event (as defined below) or otherwise) such that the Mandatory Conversion Date occurs after September 30, 2022, no interest or other amounts will accrue as a result of such postponement.

“Market Disruption Event” means, with respect to any date:

- a failure by the primary U.S. national or regional securities exchange or market on which our common stock is listed or admitted for trading to open for trading during its regular trading session on such date; or

- the occurrence or existence, prior to 1:00 p.m., New York City time, on such date, for more than a one half-hour period in the aggregate during regular trading hours, of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the relevant stock exchange or otherwise) in our common stock or in any options contracts or futures contracts relating to our common stock.

“Settlement Period” means the 20 consecutive Trading Day period beginning on, and including, the 21st Scheduled Trading Day immediately preceding September 30, 2022.

“Scheduled Trading Day” means any day that is scheduled to be a Trading Day on the principal U.S. national or regional securities exchange on which our common stock is then listed or, if our common stock is not then listed on a U.S. national or regional securities exchange, on the principal other market on which our common stock is then traded or admitted for trading. If our common stock is not so listed or traded, then “Scheduled Trading Day” means a Business Day.

A “Trading Day” is a day on which:

- there is no Market Disruption Event; and

- trading in our common stock generally occurs on The Nasdaq Global Select Market or, if our common stock is not then listed on The Nasdaq Global Select Market, on the principal other U.S. national or regional securities exchange on which our common stock is then listed or, if our common stock is not then listed on a U.S. national or regional securities exchange, on the principal other market on which our common stock is then listed or admitted for trading;

provided, *however*, that if our common stock is not traded on any such exchange, association or market, "Trading Day" means any Business Day.

"VWAP" per share of our common stock on any Trading Day means the per share volume-weighted average price as displayed on Bloomberg page "AVGO <EQUITY>AQR" (or its equivalent successor if such page is not available) in respect of the period from the scheduled open of trading until the scheduled close of trading of the primary trading session on such Trading Day; or, if such price is not available, "VWAP" means the market value per share of our common stock on such Trading Day as determined, using a volume-weighted average method, by a nationally recognized independent investment banking firm retained by us for this purpose, which may include any of the underwriters for the offering of the Mandatory Convertible Preferred Stock. The "Average VWAP" means the average of the VWAPs for each Trading Day in the relevant period.

Conversion at the Option of the Holder

Other than during a Fundamental Change Conversion Period (as defined below under "—Conversion at the Option of the Holder upon Fundamental Change; Fundamental Change Dividend Make-Whole Amount"), holders of the Mandatory Convertible Preferred Stock have the option to convert their Mandatory Convertible Preferred Stock, in whole or in part (but in no event less than one share of the Mandatory Convertible Preferred Stock), at any time prior to September 30, 2022, into shares of our common stock at the Minimum Conversion Rate of 3.0303 shares of our common stock per share of the Mandatory Convertible Preferred Stock, subject to adjustment as described under "—Anti-Dilution Adjustments" below.

If, as of the Conversion Date (as defined below) of any early conversion (the "Early Conversion Date"), we have not declared all or any portion of the accumulated dividends for all dividend periods ending on a Dividend Payment Date prior to such Early Conversion Date, the Conversion Rate for such early conversion will be increased by a number of shares of our common stock equal to the amount of such undeclared, accumulated and unpaid dividends per share of Mandatory Convertible Preferred Stock (the "Early Conversion Additional Amount") for such prior dividend periods, divided by the greater of (x) the Floor Price and (y) the Average VWAP per share of our common stock over the 20 consecutive Trading Day period (the "Early Conversion Settlement Period") commencing on, and including, the 21st Scheduled Trading Day immediately preceding the Early Conversion Date (such Average VWAP, the "Early Conversion Average Price"). Notwithstanding the last sentence under "—Method of Payment of Dividends" above, to the extent that the Early Conversion Additional Amount exceeds the product of such number of additional shares and the Early Conversion Average Price, we will not have any obligation to pay the shortfall in cash or any other consideration.

Except as described above, upon any optional conversion of any Mandatory Convertible Preferred Stock, we will make no payment or allowance for unpaid dividends on such shares of the Mandatory Convertible Preferred Stock, unless such Early Conversion Date occurs after the Record Date for a declared dividend and on or prior to the immediately succeeding Dividend Payment Date, in which case such dividend will be paid on such Dividend Payment Date to the holder of record of the converted shares of the Mandatory Convertible Preferred Stock as of the Close of Business on such Record Date, as described in the section above entitled "—Dividends."

Conversion at the Option of the Holder upon Fundamental Change; Fundamental Change Dividend Make-Whole Amount

General

If a Fundamental Change (as defined below) occurs on or prior to September 30, 2022, holders of the Mandatory Convertible Preferred Stock have the right to:

(i) convert their shares of Mandatory Convertible Preferred Stock, in whole or in part (but in no event less than one share of the Mandatory Convertible Preferred Stock), into a number of shares of common stock equal to the Fundamental Change Conversion Rate per share of Mandatory Convertible Preferred Stock described below;

(ii) with respect to such converted shares, receive a Fundamental Change Dividend Make-Whole Amount (as defined below) payable in cash or shares of our common stock; and

(iii) with respect to such converted shares, receive the Accumulated Dividend Amount (as defined below) payable in cash or shares of our common stock,

subject, in the case of clauses (ii) and (iii), to certain limitations with respect to the number of shares of our common stock that we will be required to deliver, all as described below. Notwithstanding clauses (ii) and (iii) above, if the Record Date for a dividend period for which we have, as of the Effective Date (as defined below) of a Fundamental Change, declared a dividend occurs before or during the related Fundamental Change Conversion Period (as defined below), then we will pay such dividend on the relevant Dividend Payment Date to the holders of record at the Close of Business on such Record Date, as described in "—Dividends," and the Accumulated Dividend Amount will not include the amount of such dividend, and the Fundamental Change Dividend Make-Whole Amount will not include the present value of such dividend.

To exercise this right, holders must submit their Mandatory Convertible Preferred Stock for conversion such that the Conversion Date occurs during the period (the "Fundamental Change Conversion Period") beginning on the

Effective Date of such Fundamental Change and ending on, and including, the date that is 20 calendar days after the Effective Date (or, if earlier, September 30, 2022). A Conversion Date occurring during such Fundamental Change Conversion Period is referred to herein as a "Fundamental Change Conversion Date." Holders who convert their Mandatory Convertible Preferred Stock with a Conversion Date not occurring during the Fundamental Change Conversion Period will not be entitled to the relevant Fundamental Change Conversion Rate, Fundamental Change Dividend Make-Whole Amount or Accumulated Dividend Amount.

We will notify holders of the Effective Date of a Fundamental Change no later than the second Business Day following such Effective Date. If we notify holders of a Fundamental Change later than the second Business Day following the Effective Date, the Fundamental Change Conversion Period will be extended by a number of days equal to the number of days from, and including, such Effective Date to, but excluding, the date of the notice; *provided*, *however*, that the Fundamental Change Conversion Period will not be extended beyond September 30, 2022.

A "Fundamental Change" will be deemed to have occurred, at such time after the Initial Issue Date of the Mandatory Convertible Preferred Stock, upon: (i) the consummation of any transaction or event (whether by means of an exchange offer, liquidation, tender offer, consolidation, merger, combination, recapitalization, reclassification or otherwise) in connection with which 90% or more of our common stock is exchanged for, converted into, acquired for or constitutes solely the right to receive, any other consideration 10% or more of which (excluding cash payments for fractional shares or pursuant to appraisal rights) is not common stock that is listed on, or immediately after the transaction or event will be listed on, any of the New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors) (such requirement in this clause (i) that 10% or more of such consideration (excluding cash payments for fractional shares or pursuant to appraisal rights)

not be common stock that is, or will be, listed as described above, the “10% requirement”); (ii) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any “person” or “group” of related persons (as such terms are defined in Section 13(d)(3) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) (other than (a) us or any of our subsidiaries, (b) any employee benefit plan of ours or our subsidiaries, or (c) any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the total Voting Stock (as defined below), measured by voting power rather than number of shares; or (iii) our common stock ceasing to be listed for trading on the New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors) or another U.S. national securities exchange. For the purposes of this definition of “Fundamental Change,” any transaction or event that would constitute a Fundamental Change under both clause (i) (without regard to the 10% requirement) and clause (ii) above will be deemed to occur solely under clause (i) above (subject to the 10% requirement).

“Voting Stock” of any specified person as of any date means the capital stock of such person that is at the time entitled to vote generally in the election of the board of directors or managers of such person (or, if such person is a partnership, the board of directors or other governing body of the general partner of such person).

Fundamental Change Conversion Rate

The conversion rate applicable to Mandatory Convertible Preferred Stock submitted for conversion with a Conversion Date occurring during the Fundamental Change Conversion Period for a Fundamental Change (such conversion rate, the “Fundamental Change Conversion Rate”) will be determined by reference to the table below, based on the effective date of such Fundamental Change (the “Effective Date”) and the price (the “Stock Price”) paid or deemed paid per share of our common stock in such Fundamental Change. If the holders of our common stock receive only cash in such Fundamental Change, the Stock Price shall be the cash amount paid per share of common stock. Otherwise, the Stock Price shall be the Average VWAP per share of our common stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day preceding the Effective Date.

The Stock Prices set forth in the first row of the table *i.e.*, the column headers) below will be adjusted as of any date on which the Fixed Conversion Rates of the Mandatory Convertible Preferred Stock are adjusted. The adjusted Stock Prices will equal the Stock Prices applicable immediately prior to such adjustment multiplied by a fraction, the numerator of which is the Minimum Conversion Rate immediately prior to the adjustment giving rise to the Stock Price adjustment and the denominator of which is the Minimum Conversion Rate as so adjusted. Each of the Fundamental Change Conversion Rates in the table below will be subject to adjustment in the same manner as each Fixed Conversion Rate as set forth in “—Anti-Dilution Adjustments.”

The following table sets forth the Fundamental Change Conversion Rate per share of the Mandatory Convertible Preferred Stock for each Stock Price and Effective Date set forth below.

	Stock Price													
Effective Date	**\$100.00**	**\$120.00**	**\$140.00**	**\$160.00**	**\$200.00**	**\$240.00**	**\$282.31**	**\$305.00**	**\$330.00**	**\$400.00**	**\$500.00**	**\$600.00**	**\$800.00**	**\$1,000.00**
September 30, 2019	2.4033	2.5726	2.6816	2.7506	2.8160	2.8324	2.8306	2.8276	2.8243	2.8205	2.8280	2.8424	2.8713	2.8928
September 30, 2020	2.7729	2.8893	2.9637	3.0079	3.0346	3.0163	2.9815	2.9631	2.9453	2.9125	2.8994	2.9042	2.9228	2.9376
September 30, 2021	3.1536	3.2147	3.2558	3.2805	3.2820	3.2301	3.1494	3.1072	3.0667	2.9944	2.9644	2.9647	2.9756	2.9834
September 30, 2022	3.5422	3.5422	3.5422	3.5422	3.5422	3.5422	3.5422	3.2787	3.0303	3.0303	3.0303	3.0303	3.0303	3.0303

The exact Stock Price and Effective Date may not be set forth in the table, in which case:

- if the Stock Price is between two Stock Price amounts on the table or the Effective Date is between two Effective Dates on the table, the Fundamental Change Conversion Rate will be determined by straight-line interpolation between the Fundamental Change Conversion Rates set forth for the higher and lower Stock Price amounts and the earlier and later Effective Dates, as applicable, based on a 365- or 366-day year, as applicable;

- if the Stock Price is in excess of $1,000.00 per share (subject to adjustment in the same manner as the Stock Prices set forth in the first row of the table above), then the Fundamental Change Conversion Rate will be the Minimum Conversion Rate; and

- if the Stock Price is less than $100.00 per share (subject to adjustment as described above), then the Fundamental Change Conversion Rate will be the Maximum Conversion Rate.

Fundamental Change Dividend Make-Whole Amount and Accumulated Dividend Amount

For any shares of the Mandatory Convertible Preferred Stock that are converted during the Fundamental Change Conversion Period, in addition to the common stock issued upon conversion at the Fundamental Change Conversion Rate, we will, at our option:

(a) pay holders in cash, to the extent we are legally permitted to do so and not prohibited by the terms that govern our indebtedness, an amount equal to the present value, calculated using a discount rate of 8.00% per annum, of all scheduled dividend payments (excluding any Accumulated Dividend Amount, and subject to the second sentence under "—General" above) on the Mandatory Convertible Preferred Stock for all remaining dividend periods (including any partial dividend period) from, and including, the Effective Date of the applicable Fundamental Change to, but excluding, the Mandatory Conversion Date (the "Fundamental Change Dividend Make-Whole Amount");

(b) increase the number of shares of our common stock to be issued upon conversion by a number equal to (i) the Fundamental Change Dividend Make-Whole Amount divided by (ii) the greater of (x) the Floor Price and (y) 97% of the Stock Price; or

(c) pay the Fundamental Change Dividend Make-Whole Amount through any combination of cash and shares of our common stock in accordance with the provisions of clauses (a) and (b) above.

As used herein, the term "Accumulated Dividend Amount" means, with respect to any Fundamental Change, the aggregate amount of undeclared, accumulated and unpaid dividends, if any, as of the Effective Date of the relevant Fundamental Change, for all full dividend periods prior to such Effective Date, including (but subject to the second sentence under "—General" above) for the partial dividend period, if any, from, and including, the Dividend Payment Date immediately preceding such Effective Date to, but excluding, such Effective Date. For the avoidance of doubt, if the Record Date for a dividend period for which we have, as of the Effective Date of a Fundamental Change, declared a dividend occurs before or during the related Fundamental Change Conversion Period, then we will pay such dividend on the relevant Dividend Payment Date to the holders of record at the Close of Business on such Record Date, as described in "—Dividends," and the Accumulated Dividend Amount will not include the amount of such dividend, and the Fundamental Change Dividend Make-Whole Amount will not include the present value of such dividend.

The Accumulated Dividend Amount will be payable at our option:

- in cash, to the extent we are legally permitted to do so and to the extent permitted under the terms of our indebtedness;
- in an additional number of shares of our common stock equal to (i) the Accumulated Dividend Amount divided by (ii) the greater of (x) the Floor Price and (y) 97% of the Stock Price; or
- in a combination of cash and shares of our common stock in accordance with the provisions of the preceding two bullets.

We will pay the Fundamental Change Dividend Make-Whole Amount and the Accumulated Dividend Amount in cash, except to the extent we elect on or prior to the second Business Day following the Effective Date of a Fundamental Change to make all or any portion of such payments in our common stock. In addition, if we elect to deliver common stock in respect of all or any portion of the Fundamental Change Dividend Make-Whole Amount or the Accumulated Dividend Amount, to the extent that the portion of the Fundamental Change Dividend Make-Whole Amount or the Accumulated Dividend Amount paid in common stock exceeds the product of (x) the number of additional shares we deliver in respect thereof and (y) 97% of the Stock Price, we will, if we are legally able to do so, and to the extent permitted under the terms of our indebtedness, pay such excess amount in cash.

However, if we are prohibited from paying or delivering, as the case may be, the Fundamental Change Dividend Make-Whole Amount (whether in cash or in shares of our common stock), in whole or in part, due to limitations of applicable Delaware law, then the Fundamental Change Conversion Rate will instead be increased by a number of shares of common stock equal to the quotient of the cash amount of the aggregate unpaid and undelivered Fundamental Change Dividend Make-Whole Amount, divided by the greater of (i) the Floor Price and (ii) 97% of the Stock Price. To the extent that the cash amount of the aggregate unpaid and undelivered Fundamental Change Dividend Make-Whole Amount exceeds the product of such number of additional shares and 97% of the Stock Price, we will not have any obligation to pay the shortfall in cash or any other consideration.

No fractional shares of our common stock will be delivered to converting holders of the Mandatory Convertible Preferred Stock in respect of the Fundamental Change Dividend Make-Whole Amount or the Accumulated Dividend Amount. We will instead pay a cash amount to each converting holder that would otherwise be entitled to receive a fraction of a share of our common stock based on the Average VWAP per share of our common stock over the five consecutive Trading Day period ending on, and including, the sixth Scheduled Trading Day immediately preceding the Fundamental Change Conversion Date.

Not later than the second Business Day following the Effective Date of a Fundamental Change, we will notify holders of:

- the Fundamental Change Conversion Rate;
- the Fundamental Change Dividend Make-Whole Amount and whether we will pay such amount in cash, shares of our common stock or a combination thereof, specifying the combination, if applicable; and
- the Accumulated Dividend Amount as of the Effective Date of the Fundamental Change and whether we will pay such amount in cash, shares of our common stock or a combination thereof, specifying the combination, if applicable.

Conversion Procedures

Upon Mandatory Conversion

Any outstanding shares of Mandatory Convertible Preferred Stock will automatically convert into shares of common stock on the Mandatory Conversion Date. The person or persons entitled to receive the shares of our common stock issuable upon mandatory conversion of the Mandatory Convertible Preferred Stock will be treated as the record holder(s) of such shares as of the Close of Business on the last Trading Day of the Settlement Period. Prior to the Close of Business on such last Trading Day, the common stock issuable upon conversion of the Mandatory Convertible Preferred Stock on the Mandatory Conversion Date will not be outstanding for any purpose and holders will have no rights with respect to such common stock, including voting rights, rights to respond to tender offers and rights to receive any dividends or other distributions on the common stock, by virtue of holding the Mandatory Convertible Preferred Stock.

Holders will not be required to pay any transfer or similar taxes or duties relating to the issuance or delivery of our common stock upon conversion, but holders will be required to pay any tax or duty that may be payable relating to any transfer involved in the issuance or delivery of the common stock in a name other than the holders' own, and we will not be required to settle any conversion before the second Business Day after holders have paid in full all such taxes and duties, if any, payable by holders.

Upon Early Conversion

If holders elect to convert the Mandatory Convertible Preferred Stock prior to the Mandatory Conversion Date, in the manner described in "—Conversion at the Option of the Holder" (an "Early Conversion") or "—Conversion at the Option of the Holder upon Fundamental Change; Fundamental Change Dividend Make-Whole Amount" (an "Early Fundamental Change Conversion"), holders must observe the following conversion procedures:

If shares of the Mandatory Convertible Preferred Stock are in global form, to convert the Mandatory Convertible Preferred Stock holders must deliver to DTC the appropriate instruction form for conversion pursuant to DTC's conversion program. If shares of the Mandatory Convertible Preferred Stock are held in certificated form, holders must comply with certain procedures set forth in the Certificate of Designations for the Mandatory Convertible Preferred Stock. In either case, if required, holders must pay all transfer or similar taxes or duties, if any.

The "Conversion Date" will be the date on which holders have satisfied the foregoing requirements with respect to an Early Conversion or an Early Fundamental Change Conversion. Holders will not be required to pay any transfer or similar taxes or duties relating to the issuance or delivery of our common stock if holders exercise their conversion rights, but holders will be required to pay any tax or duty that may be payable relating to any transfer involved in the issuance or delivery of the common stock in a name other than the holders' own. Common stock will be issued and delivered to the converting holder, or, if the Mandatory Convertible Preferred Stock being converted is in global form, the shares of common stock issuable upon conversion shall be delivered through the facilities of DTC, in each case together with delivery by us to the converting holder of any cash to which the converting holder is entitled, only after all applicable taxes and duties, if any, payable by holders have been paid in full, and such shares and cash will be delivered on the latest of (i) the second Business Day immediately succeeding the Conversion Date, (ii) if applicable, the second Business Day immediately succeeding the last day of the Early Conversion Settlement Period and (iii) the second Business Day after holders have paid in full all applicable taxes and duties, if any.

The person or persons entitled to receive the shares of common stock issuable upon conversion of the Mandatory Convertible Preferred Stock will be treated as the record holder(s) of such shares as of the Close of Business on the applicable Conversion Date. Prior to the Close of Business on the applicable Conversion Date, the shares of common stock issuable upon conversion of any shares of the Mandatory Convertible Preferred Stock will not be deemed to be outstanding for any purpose, and holders will have no rights with respect to such common stock, including voting rights, rights to respond to tender offers for the common stock and rights to receive any dividends or other distributions on the common stock, by virtue of holding the Mandatory Convertible Preferred Stock.

Fractional Shares

No fractional shares of our common stock will be issued to holders of the Mandatory Convertible Preferred Stock upon conversion. In lieu of any fractional shares of our common stock otherwise issuable in respect of the aggregate number of shares of the Mandatory Convertible Preferred Stock that are converted, cash will be paid in an amount (computed to the nearest cent) equal to the product of: (i) that same fraction; and (ii) the Average VWAP of our common stock over the five consecutive Trading Day period beginning on, and including, the sixth Scheduled Trading Day immediately preceding the applicable Conversion Date. If the Conversion Date occurs on or prior to the last Trading Day of such five consecutive Trading Day period, the cash payment shall be deferred until the second Business Day immediately following the last Trading Day of such five consecutive Trading Day period.

Subject to any applicable rules and procedures of DTC, if more than one share of the Mandatory Convertible Preferred Stock is surrendered for conversion at one time by or for the same holder, the number of full shares of our common stock issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of the Mandatory Convertible Preferred Stock so surrendered.

Anti-Dilution Adjustments

Each Fixed Conversion Rate will be adjusted only under the following enumerated circumstances:

(1) We issue shares of common stock to all holders of our common stock as a dividend or other distribution, in which event, each Fixed Conversion Rate in effect at the Close of Business on the date fixed for determination of the holders of our common stock entitled to receive such dividend or other distribution will be multiplied by a fraction:

- the numerator of which is the sum of (x) the number of shares of our common stock outstanding at the Close of Business on the date fixed for such determination; and (y) the total number of shares of our common stock constituting such dividend or other distribution; and

- the denominator of which is the number of shares of our common stock outstanding at the Close of Business on the date fixed for such determination, without giving effect to such dividend, distribution, stock split or stock combination.

Any adjustment made pursuant to this clause (1) will become effective immediately after the Close of Business on the date fixed for such determination. If any dividend or distribution described in this clause (1) is declared but not so paid or made, each Fixed Conversion Rate shall be readjusted, effective as of the date our board of directors, or an authorized committee thereof, publicly announces its decision not to pay or make such dividend or distribution, to such Fixed Conversion Rate that would be in effect if such dividend or distribution had not been declared. For the purposes of this clause (1), the number of shares of our common stock outstanding at the Close of Business on the date fixed for such determination shall not include shares that we hold in treasury but shall include any shares issuable in respect of any scrip certificates issued in lieu of fractions of shares of our common stock. We will not pay any dividend or make any distribution on shares of our common stock that we hold in treasury.

(2) We issue to all holders of shares of our common stock rights, options or warrants (other than rights, options or warrants issued pursuant to a dividend reinvestment plan or share purchase plan or other similar plans or pursuant to a rights plan) entitling them, for a period of up to 45 calendar days from the date of issuance of such rights, options or warrants, to subscribe for or purchase shares of our common stock at a price per share less than the Current Market Price (as defined below) of our common stock, in which case each Fixed Conversion Rate in effect at the Close of Business on the date fixed for determination of the holders of our common stock entitled to receive such rights or warrants will be increased by multiplying such Fixed Conversion Rate by a fraction:

- the numerator of which is the sum of (x) the number of shares of our common stock outstanding at the Close of Business on the date fixed for such determination and (y) the number of shares of our common stock issuable pursuant to such rights, options or warrants; and

- the denominator of which is the sum of (x) the number of shares of our common stock outstanding at the Close of Business on the date fixed for such determination and (y) the number of shares of our common stock equal to the quotient of the aggregate offering price payable to exercise such rights, options or warrants divided by the Current Market Price of our common stock.

Any adjustment made pursuant to this clause (2) will become effective immediately after the Close of Business on the date fixed for such determination. In the event that such rights, options or warrants described in this clause (2) are not so issued, each Fixed Conversion Rate shall be readjusted, effective as of the date our board of directors, or an authorized committee thereof, publicly announces its decision not to issue such rights, options or warrants, to such Fixed Conversion Rate that would then be in effect if such issuance had not been declared. To the extent that such rights, options or warrants are not exercised prior to their expiration or our common stock is otherwise not delivered pursuant to such rights, options or warrants upon the exercise of such rights, options or warrants, each Fixed Conversion Rate shall be readjusted to such Fixed Conversion Rate that would then be in effect had the adjustment made upon the issuance of such rights, options or warrants been made on the basis of the delivery of only the number of shares of our common stock actually delivered. In determining whether any rights, options or warrants entitle the holders thereof to subscribe for or purchase common stock at less than the Current Market Price, and in determining the aggregate offering price payable to exercise such rights, options or warrants, there shall be taken into account any consideration received for such rights, options or warrants and the value of such consideration (if other than cash, to be determined in good faith by our board of directors, or an authorized committee thereof, which determination shall be final, conclusive and binding). For the purposes of this clause (2), the number of shares of our common stock at the time outstanding shall not include shares that we hold in treasury but shall include any shares issuable in respect of any scrip certificates issued in lieu of fractions of shares of our common stock. We will not issue any such rights, options or warrants in respect of shares of our common stock that we hold in treasury.

(3) We subdivide or combine our common stock, in which event each Fixed Conversion Rate in effect at the Close of Business on the effective date of such subdivision or combination shall be multiplied by a fraction:

- the numerator of which is the number of shares of our common stock that would be outstanding immediately after, and solely as a result of, such subdivision or combination; and

- the denominator of which is the number of shares of our common stock outstanding immediately prior to such subdivision or combination.

Any adjustment made pursuant to this clause (3) shall become effective immediately after the Close of Business on the effective date of such subdivision or combination.

(4) (a) We distribute to all holders of our common stock evidences of our indebtedness, shares of our capital stock, securities, rights to acquire shares of our capital stock, cash or other assets, excluding:

- any dividend or distribution of shares of common stock described in clause (1) above;

- any rights or warrants described in clause (2) above;

- any dividend or distribution paid solely in cash (which, for the avoidance of doubt, will be subject to the provisions described in clause (5) below);

- any Spin-Off, as to which the provisions set forth below in this clause (4) shall apply; and
- an issuance solely pursuant to a Reorganization Event (as defined below), as to which the provisions described below under the caption "—Recapitalizations, Reclassifications and Changes of Our Common Stock" will apply,

in which event each Fixed Conversion Rate in effect at the Close of Business on the date fixed for the determination of holders of our common stock entitled to receive such distribution will be multiplied by a fraction:

- the numerator of which is the Current Market Price of our common stock; and
- the denominator of which is the Current Market Price of our common stock minus the fair market value, as determined by our board of directors, or an authorized committee thereof, in good faith (which determination shall be final, conclusive and binding), on such date fixed for determination, of the portion of the evidences of indebtedness, shares of our capital stock, securities, rights to acquire shares of our capital stock, cash or other assets so distributed applicable to one share of our common stock.

To the extent such distribution is not so paid or made, each Fixed Conversion Rate will be readjusted to the Fixed Conversion Rate that would then be in effect had the adjustment been made on the basis of only the distribution, if any, actually made or paid.

(b) In the event that we make a distribution to all holders of our common stock consisting of capital stock of, or similar equity interests in, or relating to a subsidiary or other business unit of ours (herein referred to as a "Spin-Off"), each Fixed Conversion Rate in effect at the Close of Business on the date fixed for the determination of holders of our common stock entitled to receive such distribution will be multiplied by a fraction:

- the numerator of which is the sum of (x) the Current Market Price of our common stock and (y) the fair market value, as determined by our board of directors, or an authorized committee thereof, in good faith (which determination shall be final, conclusive and binding), of the portion of those shares of capital stock or similar equity interests so distributed applicable to one share of our common stock (or, if such shares of capital stock or equity interests are listed on a U.S. national or regional securities exchange, the Current Market Price of such capital stock or equity interests); and
- the denominator of which is the Current Market Price of our common stock.

Any adjustment made pursuant to paragraph (a) or (b) of this clause (4) shall become effective immediately after the Close of Business on the date fixed for the determination of the holders of our common stock entitled to receive such distribution. In the event that such distribution described in paragraph (a) or (b) of this clause (4) is not so made, each Fixed Conversion Rate shall be readjusted, effective as of the date our board of directors, or an authorized committee thereof, publicly announces its decision not to make such distribution, to such Fixed Conversion Rate that would then be in effect if such distribution had not been declared. If (x) an adjustment to each Fixed Conversion Rate is required under this clause (4)(b) during the Settlement Period, or (y) the Conversion Date for Mandatory Convertible Preferred Stock submitted for early conversion occurs on or after the Ex-Date (as defined below) of the Spin-Off and prior to the time that the Current Market Price of our common stock is determined for purposes of clause (4)(b), then in either case delivery of the shares of our common stock issuable upon conversion will be delayed until the second Business Day immediately after the first date as of which the calculations provided for in clause (4)(b) can be completed.

(5) We pay or make a dividend or other distribution consisting exclusively of cash to all holders of our common stock, other than a regular, quarterly cash dividend that does not exceed $2.65 per share (the "Dividend Threshold," subject to adjustment as described below), excluding:

- a distribution solely pursuant to a Reorganization Event, as to which the provisions described below under the caption "—Recapitalizations, Reclassifications and Changes of Our Common Stock" will apply,
- any dividend or other distribution in connection with our voluntary or involuntary liquidation, dissolution or winding-up; and
- any consideration payable as part of a tender or exchange offer described in clause (6) below,

in which event, each Fixed Conversion Rate in effect at the Close of Business on the date fixed for determination of the holders of our common stock entitled to receive such dividend or other distribution will be multiplied by a fraction:

- the numerator of which is the Current Market Price of our common stock minus the Dividend Threshold (*provided* that if the distribution is not a regular quarterly cash dividend, then the dividend threshold will, for purposes of such distribution, be deemed to be zero); and
- the denominator of which is the Current Market Price of our common stock minus the amount per share of such dividend or other distribution.

The Dividend Threshold is subject to adjustment in a manner inversely proportional to adjustments to the Fixed Conversion Rates pursuant to the provisions described under this "—Anti-Dilution Adjustments" section; *provided*, *however*, that no adjustment will be made to the dividend threshold for any adjustment to the Fixed Conversion Rates under this clause (5).

Any adjustment made pursuant to this clause (5) shall become effective immediately after the Close of Business on the date fixed for the determination of the holders of our common stock entitled to receive such dividend or other distribution. In the event that any dividend or other distribution described in this clause (5) is not so paid or so made, each Fixed Conversion Rate shall be readjusted, effective as of the date our board of directors, or an authorized committee thereof, publicly announces its decision not to pay such dividend or make such other distribution, to such Fixed Conversion Rate which would then be in effect if such dividend or other distribution had not been declared.

(6) We or any of our subsidiaries successfully complete a tender or exchange offer (in each case that would constitute a "tender offer" under the Exchange Act) for our outstanding common stock (excluding any securities convertible or exchangeable for our common stock, and excluding a tender offer solely to holders of fewer than 100 shares of our common stock), where the cash and the value of any other consideration included in the payment per share of our common stock exceeds the Current Market Price of our common stock, in which event each Fixed Conversion Rate in effect at the Close of Business on the date of expiration of the tender or exchange offer (the "Expiration Date") will be multiplied by a fraction:

- the numerator of which shall be equal to the sum of:

  (i) the aggregate cash and fair market value (as determined in good faith by our board of directors, or an authorized committee thereof, which determination shall be final, conclusive and binding), on the Expiration Date, of any other consideration paid or payable for shares of our common stock purchased or exchanged in such tender or exchange offer; and

(ii) the product of:

1. the Current Market Price of our common stock; and

2. the number of shares of our common stock outstanding at the time such tender or exchange offer expires (excluding any shares purchased or exchanged in the tender or exchange offer); and

- the denominator of which shall be equal to the product of:

(i) the Current Market Price of our common stock; and

(ii) the number of shares of our common stock outstanding at the time such tender or exchange offer expires (including any shares purchased or exchanged in the tender or exchange offer).

The amount of any adjustment made pursuant to this clause (6) shall be determined on the 10th Trading Day immediately following the Expiration Date, but the adjustment will become effective as of the Close of Business on the Expiration Date for the tender or exchange offer. In the event that we are, or one of our subsidiaries is, obligated to purchase shares of our common stock pursuant to any such tender offer or exchange offer, but we are, or such subsidiary is, permanently prevented by applicable law from effecting any such purchases, or all such purchases are rescinded, then each Fixed Conversion Rate shall be readjusted to be such Fixed Conversion Rate that would then be in effect if such tender offer or exchange offer had not been made. Except as set forth in the preceding sentence, if the application of this clause (6) to any tender offer or exchange offer would result in a decrease in each fixed conversation rate, no adjustment shall be made for such tender offer or exchange offer under this clause (6). If (x) an adjustment to each Fixed Conversion Rate is required pursuant to this clause (6) during the Settlement Period, or (y) the Conversion Date for Mandatory Convertible Preferred Stock submitted for early conversion occurs on or after the Expiration Date described above and prior to the time that the Current Market Price of our common stock is determined for purposes of this clause (6), then in either case, delivery of the related conversion consideration will be delayed to the second Business Day immediately after the first date as of which the calculations provided for in this clause (6) can be completed.

In cases where the fair market value of the evidences of our indebtedness, shares of capital stock, securities, rights to acquire shares of our capital stock, cash or other assets as to which clauses (4)(a) or (5) above apply, applicable to one share of our common stock, dividended or distributed to stockholders equals or exceeds the Current Market Price (as determined for purposes of calculating the Conversion Rate adjustment pursuant to such clause (4)(a) or (5)), then, in lieu of the adjustment to each Fixed Conversion Rate provided for in such clause (4)(a) or (5), holders of the Mandatory Convertible Preferred Stock will be entitled to receive upon conversion of each share of Mandatory Convertible Preferred Stock, in addition to the consideration otherwise deliverable upon such conversion, the kind and amount of the evidences of our indebtedness, shares of capital stock, securities, rights to acquire shares of our capital stock, cash or other assets comprising such dividend or distribution that such holder would have received if such holder had owned, immediately prior to the record date for determining the holders of our common stock entitled to receive such dividend or distribution, a number of shares of our common stock equal to the Maximum Conversion Rate in effect on such record date.

To the extent that we have a rights plan in effect with respect to our common stock on any Conversion Date or the Mandatory Conversion Date, upon conversion of any Mandatory Convertible Preferred Stock, holders will receive, in addition to common stock, the rights under the rights plan, unless, prior to such conversion date, the rights have separated from our common stock, in which case, and only in such case, each Fixed Conversion Rate will be adjusted at the time of separation as if we made a distribution to all holders of our common stock as described in clause (4)(a) above, subject to readjustment in the event of the expiration, termination or redemption of such rights.

Notwithstanding anything to the contrary described in this "—Anti-Dilution Adjustments" section, the Fixed Conversion Rates will not be adjusted on account of any rights issued pursuant to a rights plan, except to the extent provided in the preceding sentence. Any distribution of rights or warrants pursuant to a rights plan that would allow holders to receive upon conversion, in addition to any common stock, the rights described therein shall not constitute a distribution of rights or warrants that would entitle holders to an adjustment to the Conversion Rate, unless and until such rights or warrants have separated from our common stock.

For the purposes of determining the adjustment to the Fixed Conversion Rate for the purposes of:

- clauses (2), (4)(a) and (5) above, the "Current Market Price" of our common stock is the Average VWAP per share of our common stock over the five consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-Date with respect to the issuance, distribution or dividend requiring such computation;

- clause (4)(b) above, the "Current Market Price" of our common stock and the capital stock or equity interests of the subsidiary or other business unit being distributed, as applicable, is the Average VWAP per share of common stock, capital stock or equity interests of the subsidiary or other business unit being distributed, as applicable, over the first ten consecutive Trading Day period commencing on, and including, the Ex-Date of such distribution (which Average VWAP, in the case of any such capital stock or equity interests, will be determined as if references to our common stock, and the ticker symbol thereof, in the definitions of VWAP and Trading Day were instead references to such capital stock or equity interests, or the ticker symbol thereof, as applicable); and

- clause (6) above, the "Current Market Price" of our common stock is the Average VWAP per share of our common stock over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the Expiration Date of the relevant tender offer or exchange offer.

The term "Ex-Date," when used with respect to any issuance or distribution, means the first date on which shares of our common stock trade, regular way, without the right to receive such issuance or distribution. For the avoidance of doubt, any alternative trading convention on the applicable exchange or market in respect of our common stock under a separate ticker symbol or CUSIP number will not be considered "regular way" for this purpose.

In addition, we may make such increases in each Fixed Conversion Rate as we deem advisable in order to avoid or diminish any income tax to holders of our common stock resulting from any dividend or distribution of shares of our common stock (or issuance of rights or warrants to acquire shares of our common stock) or from any event treated as such for income tax purposes or for any other reason. We may only make such a discretionary adjustment if we make the same proportionate adjustment to each Fixed Conversion Rate.

All adjustments to each Fixed Conversion Rate will be calculated to the nearest 1/10,000th of a share of our common stock. Prior to the first Trading Day of the Settlement Period, no adjustment in a Fixed Conversion Rate will be required unless the adjustment would require an increase or decrease of at least one percent in such Fixed Conversion Rate. If any adjustment is not required to be made because it would not change the Fixed Conversion Rates by at least one percent, then the adjustment will be carried forward and taken into account in any subsequent adjustment; *provided*, *however*, that on (x) the earlier of any Early Conversion Date and the Effective Date of any Fundamental Change and (y) each Trading Day of the Settlement Period, adjustments to each Fixed Conversion Rate will be made with respect to any such adjustment carried forward that has not been taken into account before such date.

No adjustment to the Fixed Conversion Rates will be made if holders may participate, at the same time, upon the same terms and otherwise on the same basis as holders of our common stock and solely as a result of holding Mandatory Convertible Preferred Stock, in the transaction that would otherwise give rise to such adjustment as if they held, for each share of the Mandatory Convertible Preferred Stock, a number of shares of our common stock equal to the Maximum Conversion Rate then in effect.

We are not required to adjust either Fixed Conversion Rate except as described above. Notwithstanding anything to the contrary described above, and without limiting the prior sentence, the Fixed Conversion Rates will not be adjusted:

(a) upon the issuance of any shares of our common stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on our securities and the investment of additional optional amounts in shares of common stock under any plan;

(b) upon the issuance of any shares of our common stock or rights, warrants, options, units or other securities exercisable for the purchase of those shares pursuant to any present or future retirement, deferred compensation, incentive or other benefit plan or program of or assumed by us or any of our subsidiaries;

(c) upon the issuance of any shares of our common stock pursuant to any option, warrant, right or exercisable, exchangeable or convertible security outstanding as of the Initial Issue Date;

(d) for a change in the par value of our common stock;

(e) for stock repurchases, including structured or derivative transactions, that are not tender offers;

(f) as a result of a tender offer that satisfies the exception described in clause (6) above for offers solely to holders of fewer than 100 shares of our common stock;

(g) as a result of a tender or exchange offer by a person other than us or one or more of our subsidiaries; or

(h) for accumulated dividends on the Mandatory Convertible Preferred Stock, except as described above under "—Mandatory Conversion," "—Conversion at the Option of the Holder" and "—Conversion at the Option of the Holder upon Fundamental Change; Fundamental Change Dividend Make-Whole Amount."

We are required, within 10 Business Days following the effectiveness of an adjustment to the Fixed Conversion Rates, to provide, or cause to be provided, a written notice of such adjustment to the holders of the Mandatory Convertible Preferred Stock. We will also be required to deliver a statement setting forth in reasonable detail the method by which the adjustment to each Fixed Conversion Rate was determined and setting forth such adjusted Fixed Conversion Rate.

For the avoidance of doubt, each of the Threshold Appreciation Price, the Initial Price and the Floor Price will be automatically adjusted, in accordance with the respective definitions of such terms, upon the effectiveness of each adjustment to the Fixed Conversion Rates. Whenever any provision of the Certificate of Designations requires us to calculate the VWAP per share of our common stock over a span of multiple days, we will make appropriate adjustments (including, without limitation, to the Applicable Market Value, the Early Conversion Average Price, the Current Market Price and the Average Price (as the case may be)) to account for any adjustments to the Initial Price, the Threshold Appreciation Price, the Floor Price and the Fixed Conversion Rates (as the case may be) that become effective, or any event that would require such an adjustment if the Ex-Date, Effective Date or Expiration Date (as the case may be) of such event occurs, during the relevant period used to calculate such prices or values (as the case may be).

If:

- the record date for a dividend or distribution on shares of our common stock occurs after the end of the Settlement Period and before the Mandatory Conversion Date; and

- such dividend or distribution would have resulted in an adjustment of the number of shares of common stock issuable to the holders of the Mandatory Convertible Preferred Stock had such record date occurred on or before the last Trading Day of the Settlement Period,

then we will deem the holders of the Mandatory Convertible Preferred Stock to be holders of record, for each share of their Mandatory Convertible Preferred Stock, of a number of shares of our common stock equal to the Conversion Rate for purposes of that dividend or distribution. In this case, the holders of the Mandatory Convertible Preferred Stock would receive the dividend or distribution on our common stock together with the number of shares of our common stock issuable upon mandatory conversion of the Mandatory Convertible Preferred Stock.

Recapitalizations, Reclassifications and Changes of Our Common Stock

If there occurs:

- any consolidation or merger of us with or into another person (other than a merger or consolidation in which we are the surviving corporation and in which the shares of our common stock outstanding immediately prior to the merger or consolidation are not exchanged for cash, securities or other property of us or another person);

- any sale, transfer, lease or conveyance to another person of all or substantially all of our property and assets;

- any reclassification of our common stock into securities, including securities other than our common stock; or

- any statutory exchange of our securities with another person (other than in connection with a merger or acquisition),

in each case, as a result of which our common stock would be converted into, or exchanged for, securities, cash or property (each such event, a "Reorganization Event," and such securities, cash or property, the "Reference Property," and the amount and kind of Reference Property that a holder of one share of our common stock would be entitled to receive on account of such Reorganization Event (without giving effect to any arrangement not to issue or deliver a fractional portion of any security or other property), a "Reference Property Unit"), then, notwithstanding anything to the contrary described above,

- from and after the effective time of such Reorganization Event, (i) the consideration due upon conversion of any Mandatory Convertible Preferred Stock will be determined in the same manner as if each reference to any number of shares of common stock in the provisions described under this "Description of Mandatory Convertible Preferred Stock" section (or in any related definitions) were instead a reference to the same number of Reference Property Units; and (ii) for purposes of the definition of "Fundamental Change" and "Voting Stock," the terms "common stock" and "capital stock" will be deemed to mean the common equity (including depositary receipts representing common equity), if any, forming part of such Reference Property;

- for these purposes, the VWAP of any Reference Property Unit or portion thereof that does not consist of a class of securities will be the fair value of such Reference Property Unit or portion thereof, as applicable, determined in good faith by us (or, in the case of cash denominated in U.S. dollars, the face amount thereof); and

- at the effective time of such Reorganization Event, we may amend the Certificate of Designations without the consent of the holders of the Mandatory Convertible Preferred Stock to give effect to the provisions described in the previous bullet points.

For purposes of the foregoing, the type and amount of Reference Property in the case of any Reorganization Event that causes our common stock to be converted into the right to receive more than a single type of consideration (determined based in part upon any form of stockholder election) will be deemed to be the weighted average of the types and amounts of consideration actually received by the holders of our common stock. We will notify holders of the Mandatory Convertible Preferred Stock of the weighted average as soon as practicable after such determination is made.

We (or any successor to us) will, as soon as reasonably practicable (but in any event within 20 calendar days) after the occurrence of any Reorganization Event, provide written notice to the holders of the Mandatory Convertible Preferred Stock of such occurrence and of the kind and amount of cash, securities or other property that constitute the Reference Property. Failure to deliver such notice will not affect the operation of the provisions described in this section.

In connection with any Reorganization Event and the application of the provisions described above, we will also adjust the Dividend Threshold (as defined above) based on the number of shares of common stock or other equity interests comprising the Reference Property and (if applicable) the value of any non-stock consideration comprising the Reference Property.

Notices

We will send all notices or communications to holders of the Mandatory Convertible Preferred Stock pursuant to the Certificate of Designations in writing by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery, to the holders' respective addresses shown on the register for the Mandatory Convertible Preferred Stock. However, in the case of Mandatory Convertible Preferred Stock in the form of global securities, we are permitted to send notices or communications to holders pursuant to DTC's procedures, and notices and communications that we send in this manner will be deemed to have been properly sent to such holders in writing.

Reservation of Shares

We will at all times reserve and keep available out of the authorized and unissued common stock, solely for issuance upon conversion of the Mandatory Convertible Preferred Stock, free from any preemptive or other similar rights, a number of shares of our common stock equal to the product of the Maximum Conversion Rate then in effect and the number of shares of the Mandatory Convertible Preferred Stock then outstanding.

Transfer Agent and Registrar

Computershare Trust Company, N.A. is the transfer agent, registrar and conversion and dividend disbursing agent for the Mandatory Convertible Preferred Stock.

Book-Entry, Delivery and Form

The Mandatory Convertible Preferred Stock are issued in global form. DTC or its nominee is the sole registered holder of the Mandatory Convertible Preferred Stock. Ownership of beneficial interests in the Mandatory Convertible Preferred Stock in global form will be limited to persons who have accounts with DTC ("Participants") or persons who hold interests through such Participants. Ownership of beneficial interests in the Mandatory Convertible Preferred Stock in global form is shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of Participants) and the records of Participants (with respect to interests of persons other than Participants).

So long as DTC, or its nominee, is the registered owner or holder of a global certificate representing the shares of the Mandatory Convertible Preferred Stock, DTC or such nominee, as the case may be, will be considered the sole holder of the shares of the Mandatory Convertible Preferred Stock represented by such global certificate for all purposes under the Certificate of Designations establishing the terms of the Mandatory Convertible Preferred Stock. No beneficial owner of an interest in the shares of the Mandatory Convertible Preferred Stock in global form will be able to transfer that interest except in accordance with the applicable procedures of DTC in addition to those provided for under the Certificate of Designations establishing the terms of the Mandatory Convertible Preferred Stock.

Payments of dividends on the global certificate representing the shares of the Mandatory Convertible Preferred Stock will be made to DTC or its nominee, as the case may be, as the registered holder thereof. None of us, the transfer agent, registrar, conversion or dividend disbursing agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a global certificate representing the shares of the Mandatory Convertible Preferred Stock or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Transfers between Participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

Notice of Grant of Restricted Stock Unit Award
Under the Broadcom Corporation
2012 Stock Incentive Plan

BROADCOM INC.
1320 Ridder Park Drive
San Jose, CA 95131

GRANTEE NAME: <Participant Name>
GRANTEE ID: <Employee ID>
GRANT NUMBER: <Client Grant ID>

Grant Date: <Grant Date>
Number of Restricted Stock Units: <Number of Awards Granted>

On the grant date shown above, Broadcom Inc., a Delaware corporation (the "***Company***"), granted to the grantee identified above ("***you***" or the "***Participant***") the number of restricted stock units shown above (the "***RSUs***" or "***Restricted Stock Units***") under the Broadcom Corporation 2012 Stock Incentive Plan, as amended (the "***Plan***"). If and when it vests, each RSU entitles you to receive one share of the Company's common stock (each, a "***Share***").

Subject to the terms of the attached Restricted Stock Unit Award Agreement, the RSUs will vest as follows if you have not incurred a Termination of Services prior to the applicable time of vesting:

[insert vesting provisions]

By accepting this award electronically through the Plan service provider's online grant acceptance process:

(1) You agree that the RSUs are governed by this Notice of Grant and the attached Restricted Stock Unit Award Agreement (including Exhibits and Annexes thereto and together with the Notice of Grant, the "***Agreement***") and the Plan.

(2) You have received, read and understand the Agreement, the Plan and the prospectus for the Plan.

(3) If you are an employee providing services in the U.S., you agree in Section 3.12 of the Agreement to the arbitration agreement contained in Exhibit B of the Agreement, which requires you to arbitrate most disputes with the Company or any subsidiary.

(4) You agree that the Company, in its sole discretion, may satisfy any withholding obligations in respect of the RSUs and any other restricted stock units, if any, granted to you prior to the Grant Date under the Plan or any other Company equity incentive plan (each, a "***Prior Award***") in accordance with Section 2.6 of the Agreement by (i) withholding Shares otherwise issuable to you upon vesting of the RSUs or such Prior Award, (ii) instructing a broker on your behalf to sell Shares issuable to you upon vesting of the RSUs or such Prior Award and submit proceeds of such sale to the Company or (iii) using any other method permitted by Section 2.6 of the Agreement, the Plan or the equity incentive plan pursuant to which such Prior Award was granted.

(5) You agree to accept as binding all decisions or interpretations of the Plan Administrator or its delegate regarding any questions relating to the Plan or the Agreement, including, if you provide services outside the United States, the global provisions and any specific provisions for the country in which you provide services, attached to the Agreement as Exhibit A.

(6) You have read and agree to comply with the Company's Insider Trading Policy.

Capitalized terms not specifically defined in this Notice shall have the meanings specified in the Plan or the Agreement.

BROADCOM CORPORATION
2012 STOCK INCENTIVE PLAN

RESTRICTED STOCK UNIT AWARD AGREEMENT

Broadcom Inc., a Delaware corporation (the "***Company***"), pursuant to its Broadcom Corporation 2012 Stock Incentive Plan, as amended from time to time (the "***Plan***"), has granted to the grantee indicated in the attached Notice of Grant (the "***Notice of Grant***") an award of restricted stock units ("***Restricted Stock Units***" or "***RSUs***"). The RSUs are subject to all of the terms and conditions set forth in this Restricted Stock Unit Award Agreement (including Exhibits and Annexes hereto and together with the Notice of Grant, the "***Agreement***") and the Plan.

BY ACCEPTING THIS AWARD, YOU CONSENT TO THE USE AND SHARING OF YOUR PERSONAL DATA AS SET FORTH IN THE APPLICABLE PROVISIONS IN EXHIBIT A

ARTICLE I

GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined in this Agreement shall have the meanings specified in the Plan or in the Notice of Grant, unless the context clearly requires otherwise.

(a) "***Termination of Consultancy***" shall mean the time when the engagement of Participant as a consultant to the Company or a Subsidiary is terminated for any reason, with or without cause, including, but not by way of limitation, by resignation, discharge, death, disability, or retirement, but excluding: (a) terminations where there is a simultaneous employment or continuing employment of Participant by the Company or any Subsidiary, and (b) terminations where there is a simultaneous re-establishment of a consulting relationship or continuing consulting relationship between Participant and the Company or any Subsidiary. The Plan Administrator, in its absolute discretion, shall determine the effect of all matters and questions relating to Termination of Consultancy, including, but not by way of limitation, the question of whether a particular leave of absence constitutes a Termination of Consultancy. Notwithstanding any other provision of the Plan, the Company or any Subsidiary has an absolute and unrestricted right to terminate a consultant's service at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in writing.

(b) "***Termination of Directorship***" shall mean the time when Participant, if he or she is or becomes a non-employee director of the Board, ceases to be a director for any reason, including, but not by way of limitation, a termination by resignation, failure to be elected, death or retirement. The Board, in its sole and absolute discretion, shall determine the effect of all matters and questions relating to Termination of Directorship with respect to non-employee directors.

(c) "***Termination of Employment***" shall mean the time when the employee-employer relationship between Participant and the Company or any Subsidiary is terminated for any reason, with or without cause, including, but not by way of limitation, a termination by resignation, discharge, death, disability or retirement; but excluding: (a) terminations where there is a simultaneous reemployment or continuing employment of Participant by the Company or any Subsidiary, and (b) terminations where there is a simultaneous establishment of a consulting relationship or continuing consulting relationship between Participant and the Company or any Subsidiary. The Plan Administrator, in its absolute discretion, shall

determine the effect of all matters and questions relating to Termination of Employment, including, but not by way of limitation, the question of whether a particular leave of absence constitutes a Termination of Employment.

(d) "***Termination of Services***" shall mean Participant's Termination of Consultancy, Termination of Directorship or Termination of Employment, as applicable.

1.2 General. Each Restricted Stock Unit represents the right to receive one Share if and when it vests. The Restricted Stock Units shall not be treated as property or as a trust fund of any kind.

1.3 Incorporation of Terms of Plan. RSUs are subject to the terms and conditions of the Plan which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II

GRANT OF RESTRICTED STOCK UNITS

2.1 Grant of RSUs. In consideration of your continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice of Grant (the "***Grant Date***"), the Company granted to you the number of RSUs set forth in the Notice of Grant.

2.2 Company's Obligation to Pay. Unless and until the RSUs will have vested in the manner set forth in Article II hereof, you will have no right to payment of any such RSUs. Prior to actual payment of any vested RSUs, such RSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

2.3 Vesting Schedule. Subject to Sections 2.4 and 3.12, your RSUs will vest and become nonforfeitable with respect to the applicable portion thereof according to the vesting schedule set forth in the Notice of Grant (the "***Vesting Schedule***") as long as you have not had a Termination of Services prior to the vesting date for such portion. Unless otherwise determined by the Plan Administrator, employment or service for a portion, even a substantial portion, of any vesting period will not entitle you to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a Termination of Services as provided in Section 2.5 below or under the Plan.

2.4 Change in Control Treatment. In the event the successor corporation in a Change in Control refuses to assume or substitute for the RSUs in accordance with Section II.A of Article Three of the Plan, the RSUs will vest as of immediately prior to such Change in Control.

2.5 Forfeiture, Termination and Cancellation upon Termination of Services. Upon your Termination of Services for any or no reason, any then-unvested RSUs (after giving effect to any accelerated vesting pursuant to Section 2.4) will be automatically forfeited, terminated and cancelled as of the applicable termination date without payment of any consideration by the Company, and you, or your beneficiary or personal representative, as the case may be, shall have no further rights hereunder.

2.6 Payment after Vesting.

(a) On or before the tenth (10^{th}) day following the vesting of any Restricted Stock Units pursuant to Section 2.3, 2.4 or 3.2, the Company shall deliver to the Participant a number of Shares equal

to the number of Restricted Stock Units that so vested, unless such Restricted Stock Units terminate prior to the given vesting date pursuant to Section 2.5. Notwithstanding the foregoing, in the event Shares cannot be issued because of the failure to meet one or more of the conditions set forth in Section 2.8(a), (b) or (c) hereof, then the Shares shall be issued pursuant to the preceding sentence as soon as administratively practicable after the Plan Administrator determines that Shares can again be issued in accordance with Sections 2.8(a), (b) and (c) hereof. Notwithstanding any discretion in the Plan, the Notice of Grant or this Agreement to the contrary, upon vesting of the RSUs, Shares will be issued as set forth in this section. In no event will the RSUs be settled in cash.

(b) Notwithstanding anything to the contrary in this Agreement or the agreements evidencing any Prior Awards, the Company shall be entitled to require you to pay any sums required by applicable law to be withheld with respect to the RSUs, the issuance of Shares or with respect to any Prior Awards. Such payment shall be made in such form of consideration as determined by the Company in its sole discretion, including:

(i) Cash or check;

(ii) Surrender or withholding of Shares otherwise issuable under the RSUs or Prior Awards, as applicable, and having an aggregate fair market value on the date of delivery sufficient to meet the withholding obligation, as determined by the Company in its sole discretion;

(iii) Other property acceptable to the Company in its sole discretion (including cash resulting from a transaction (a " ***Sell to Cover***") in which the Company, on your behalf, instructs Fidelity Stock Plan Services, LLC or one of its affiliates or another agent selected by the Company (collectively, the "***Agent***") to sell a number of Shares issued to you sufficient to meet the withholding obligation, as determined by the Company in its sole discretion, and to remit proceeds of such sale to the Company sufficient to satisfy the withholding obligation); or

(iv) By deduction from other compensation payable to you.

If the Company requires or permits a Sell to Cover:

(A) You hereby appoint the Agent as your agent and direct the Agent to (1) sell on the open market at the then prevailing market price(s), on your behalf, promptly after any RSUs (or Prior Awards) vest, such number of the Shares that are issued in respect of such RSUs (or subject to or issued in respect of such Prior Awards) as the Agent determines will generate sufficient proceeds to cover (x) any estimated tax, social insurance, payroll, fringe benefit or similar withholding obligations with respect to such vesting and (y) all applicable fees and commissions due to, or required to be collected by, the Agent with respect thereto and (2) in the Company's discretion, apply any remaining funds to your federal tax withholding or remit such remaining funds to you.

(B) You hereby authorize the Company and the Agent to cooperate and communicate with one another to determine the number of Shares to be sold pursuant to subsection (A) above. You understand that to protect against declines in the market price of Shares, the Agent may determine to sell more than the minimum number of Shares needed to generate the required funds.

(C) You understand that the Agent may effect sales as provided in subsection (A) above in one or more sales and that the average price for executions resulting from bunched orders will be assigned to your account. In addition, you acknowledge that it may not be possible to sell Shares as provided in subsection (A) above due to (1) a legal or contractual restriction applicable to the Agent,

(2) a market disruption, or (3) rules governing order execution priority on the national exchange where the Shares may be traded. In the event of the Agent's inability to sell Shares, you will continue to be responsible for the timely payment to the Company and/or its affiliates of all federal, state, local and foreign taxes that are required by applicable laws and regulations to be withheld, including but not limited to those amounts specified in subsection (A) above.

(D) You acknowledge that, regardless of any other term or condition of this Section 2.6(b), neither the Company nor the Agent will have any liability to you for (1) special, indirect, punitive, exemplary, or consequential damages, or incidental losses or damages of any kind, (2) any failure to perform or for any delay in performance that results from a cause or circumstance that is beyond its reasonable control, or (3) any claim relating to the timing of any Sell to Cover, the price at which Shares are sold in any Sell to Cover, or the timing of the delivery to you of any Shares following any Sell to Cover. Regardless of the Company's or any Subsidiary's actions in connection with tax withholding pursuant to this Agreement, you acknowledge that the ultimate responsibility for any and all tax-related items imposed on you in connection with any aspect of the RSUs (and any Prior Awards) and any Shares issued upon vesting of the RSUs (or subject to or issued in respect of your Prior Awards) is and remains your responsibility and liability. Except as expressly stated herein, neither the Company nor any Subsidiary makes any commitment to structure the RSUs (or any Prior Award) to reduce or eliminate your liability for tax-related items.

(E) You hereby agree to execute and deliver to the Agent any other agreements or documents as the Agent reasonably deems necessary or appropriate to carry out the purposes and intent of this Section 2.6(b). The Agent is a third-party beneficiary of this Section 2.6(b).

This Section 2.6(b) shall survive termination of this Agreement until all tax withholding obligations arising in connection with this Award have been satisfied.

The Company shall not be obligated to deliver any Shares to you unless and until you have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes required to be withheld in connection with the grant or vesting of the RSUs.

2.7 Rights as Stockholder. As a holder of RSUs you are not, and do not have any of the rights or privileges of, a stockholder of the Company, including, without limitation, any dividend rights or voting rights, in respect of the RSUs and any Shares issuable upon vesting thereof unless and until such Shares shall have been actually issued by the Company to you. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section II.A of Article Three of the Plan.

2.8 Conditions to Delivery of Shares. Subject to Section VI of Article Five of the Plan, the Shares deliverable hereunder, or any portion thereof, may be either previously authorized but unissued Shares or issued Shares which have then been reacquired by the Company. Such Shares shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any Shares deliverable hereunder prior to fulfillment of all of the following conditions:

(a) The admission of such Shares to listing on all stock exchanges on which the Shares are then listed;

(b) The completion of any registration or other qualification of such Shares under any state, federal or foreign law or under rulings or regulations of the Securities and Exchange

Commission or of any other governmental regulatory body, which the Plan Administrator shall, in its absolute discretion, deem necessary or advisable;

(c) The obtaining of any approval or other clearance from any state, federal or foreign governmental agency which the Plan Administrator shall, in its absolute discretion, determine to be necessary or advisable;

(d) The receipt by the Company of full payment for such Shares, including payment of any applicable withholding tax, which may be in one or more of the forms of consideration permitted under Section 2.6 hereof; and

(e) The lapse of such reasonable period of time following the vesting of any Restricted Stock Units as the Plan Administrator may from time to time establish for reasons of administrative convenience.

ARTICLE III

OTHER PROVISIONS

3.1 Administration. The Plan Administrator shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Plan Administrator in good faith shall be final and binding upon you, the Company and all other interested persons. No member of the Plan Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the RSUs.

3.2 Adjustments Upon Specified Events. In addition, upon the occurrence of certain events relating to the Shares contemplated by Section V.E of Article One and Section II of Article Three of the Plan (including, without limitation, an extraordinary cash dividend on such Shares), the Plan Administrator shall make such adjustments as the Plan Administrator deems appropriate in the number of Restricted Stock Units then outstanding and the number and kind of securities that may be issued in respect of the Restricted Stock Units. You acknowledge that the RSUs are subject to modification and termination in certain events as provided in this Agreement and Articles One and Three of the Plan.

3.3 Grant is Not Transferable. Your RSUs may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of the RSUs, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, the RSUs will terminate immediately and will become null and void.

3.4 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Participant shall be addressed to Participant at the Participant's last address reflected on the Company's records, including any email address. By a notice given pursuant to this Section 3.4, either party may hereafter designate a different address for notices to be given to that party. Any notice

to the Company shall be deemed given when actually received. Any notice given by the Company shall be deemed given when sent via email or 5 U.S. business days after mailing.

3.5 Titles. Titles provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

3.6 Governing Law; Severability. The laws of the State of California shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

3.7 Conformity to Securities Laws. You acknowledge that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended (the "***Exchange Act***") and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state and foreign securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the RSUs are granted, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

3.8 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Plan Administrator or the Board*, provided,* that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the RSUs in any material way without your prior written consent.

3.9 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in Section 3.3 hereof, this Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

3.10 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if you are subject to Section 16 of the Exchange Act, the Plan, the RSUs and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by and necessary to comply with applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

3.11 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall be interpreted as forming an employment or service contract with the Company or any Parent or Subsidiary or as conferring upon you any right to continue to serve as an employee or other service provider of the Company or any of its Subsidiaries.

3.12 Dispute Resolution. By accepting the RSUs, if you are an employee providing services in the U.S., you agree to the provisions of, and to be bound by, the Broadcom Inc. Employment Arbitration Agreement attached as Exhibit B hereto (the "***Arbitration Agreement***"). In the event you violate the Arbitration Agreement, any unvested RSUs will thereupon be cancelled for no consideration.

3.13 Entire Agreement. The Plan, the Notice of Grant and this Agreement constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

3.14 Section 409A. The RSUs are not intended to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "***Section 409A***"). However, notwithstanding any other provision of the Plan or this Agreement, if at any time the Plan Administrator determines that the RSUs (or any portion thereof) may be subject to Section 409A, the Plan Administrator shall have the right in its sole discretion (without any obligation to do so or to indemnify you or any other person for failure to do so) to adopt such amendments to the Plan or this Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Plan Administrator determines are necessary or appropriate either for the RSUs to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

3.15 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. Neither the Plan nor any underlying program, in and of itself, has any assets. The Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the RSUs, and rights no greater than the right to receive the Shares as a general unsecured creditor with respect to RSUs, as and when payable hereunder.

3.16 Additional Terms for Participants Providing Services Outside the United States. To the extent you provide services to the Company or a Subsidiary in a country other than the United States, the RSUs shall be subject to such additional or substitute terms as shall be set forth for such country in Exhibit A attached hereto. If you relocate to one of the countries included in Exhibit A during the life of the RSUs, Exhibit A, including the provisions for such country, shall apply to you and the RSUs, to the extent the Company determines that the application of such provisions is necessary or advisable in order to comply with applicable law or facilitate the administration of the Plan. In addition, the Company reserves the right to impose other requirements on the RSUs and the Shares issued upon vesting of the RSUs, to the extent the Company determines it is necessary or advisable in order to comply with local laws or facilitate the administration of the Plan, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

* * * * *

EXHIBIT A
TO BROADCOM CORPORATION
2012 STOCK INCENTIVE PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT

This Exhibit A includes (i) additional terms and conditions applicable to all Participants providing services to the Company or a Subsidiary outside the United States, and (ii) additional terms applicable to Participants providing services to the Company or a Subsidiary in the countries identified below.

EXHIBIT B

BROADCOM INC. EMPLOYMENT ARBITRATION AGREEMENT

Notice of Grant of Performance Stock Unit Award
Under the Broadcom Corporation 2012 Stock Incentive Plan

BROADCOM INC.
1320 Ridder Park Drive
San Jose, CA 95131

GRANTEE NAME: <Participant Name>
GRANTEE ID: <Employee ID>
GRANT NUMBER: <Client Grant ID>

Grant Date: <Grant Date>
Number of Performance Stock Units: <Grant Custom Field 4>

The maximum number of shares that may be issued in respect of the Performance Stock Units is <Number of Awards Granted> shares.

On the grant date shown above (the "***Grant Date***"), Broadcom Inc., a Delaware corporation (the "***Company***"), granted to the grantee identified above ("***you***" or the "***Participant***") the number of performance stock units shown above (the "***PSUs***" or "***Performance Stock Units"***) under the Broadcom Corporation 2012 Stock Incentive Plan, as amended (the "***Plan***"). If and when it vests, each PSU entitles you to receive a number of shares of the Company's common stock (each, a "***Share***") as determined below.

The number of Shares issuable in respect of each Performance Period (as defined in Exhibit A) shall be determined by multiplying the Achievement Factor (as determined in accordance with Exhibit A) for such Performance Period by twenty-five percent (25%) of the total number of PSUs shown above, if you have not incurred a Termination of Services prior to the anniversary of the Grant Date immediately following the end of such Performance Period (each such anniversary, a "***Vesting Date***") and subject to the additional terms set forth in the attached Performance Stock Unit Award Agreement.

By accepting this award electronically through the Plan service provider's online grant acceptance process:

(1) You agree that the PSUs are governed by this Notice of Grant and the attached Performance Stock Unit Award Agreement (including Exhibits and Annexes thereto and together with the Notice of Grant, the "***Agreement***") and the Plan.

(2) You have received, read and understand the Agreement, the Plan and the prospectus for the Plan.

(3) If you are an employee providing services in the U.S., you agree in Section 3.12 of the Agreement to the arbitration agreement contained in Exhibit C of the Agreement, which requires you to arbitrate most disputes with the Company or any subsidiary.

(4) You agree that the Company, in its sole discretion, may satisfy any withholding obligations in respect of the PSUs and any other performance stock units or restricted stock units, if any, granted to you prior to the Grant Date under the Plan or any other

Company equity incentive plan (each, a "***Prior Award***") in accordance with Section 2.6 of the Agreement by (i) withholding Shares issuable to you upon vesting of the PSUs or such Prior Award, (ii) instructing a broker on your behalf to sell Shares otherwise issuable to you upon vesting of the PSUs or such Prior Award and submit proceeds of such sale to the Company or (iii) using any other method permitted by Section 2.6 of the Agreement, the Plan or the equity incentive plan pursuant to which such Prior Award was granted.

(5) You agree to accept as binding all decisions or interpretations of the Plan Administrator or its delegate regarding any questions relating to the Plan or the Agreement, including, if you provide services outside the United States, the global provisions and any specific provisions for the country in which you provide services, attached to the Agreement as Exhibit B (the "***Foreign Provisions***").

(6) You have read and agree to comply with the Company's Insider Trading Policy.

Capitalized terms not specifically defined in this Notice shall have the meanings specified in the Plan or the Agreement.

BROADCOM CORPORATION
2012 STOCK INCENTIVE PLAN

PERFORMANCE STOCK UNIT AWARD AGREEMENT

Broadcom Inc., a Delaware corporation (the "***Company***"), pursuant to the Broadcom Corporation 2012 Stock Incentive Plan, as amended from time to time (the "***Plan***"), has granted to the grantee indicated in the attached Notice of Grant (the "***Notice of Grant***") an award of performance stock units ("***Performance Stock Units***" or "***PSUs***"). The PSUs are subject to all of the terms and conditions set forth in this Performance Stock Unit Award Agreement (including Exhibits and Annexes thereto and together with the Notice of Grant, the "***Agreement***") and the Plan.

BY ACCEPTING THIS AWARD, YOU CONSENT TO THE USE AND SHARING OF YOUR PERSONAL DATA AS SET FORTH IN THE APPLICABLE PROVISIONS IN EXHIBIT B.

ARTICLE I

GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined in this Agreement shall have the meanings specified in the Plan or in the Notice of Grant, unless the context clearly requires otherwise.

(a) "***Termination of Consultancy***" shall mean the time when the engagement of Participant as a consultant to the Company or a Subsidiary is terminated for any reason, with or without cause, including, but not by way of limitation, by resignation, discharge, death, disability, or retirement, but excluding: (a) terminations where there is a simultaneous employment or continuing employment of Participant by the Company or any Subsidiary, and (b) terminations where there is a simultaneous re-establishment of a consulting relationship or continuing consulting relationship between Participant and the Company or any Subsidiary. The Plan Administrator, in its absolute discretion, shall determine the effect of all matters and questions relating to Termination of Consultancy, including, but not by way of limitation, the question of whether a particular leave of absence constitutes a Termination of Consultancy. Notwithstanding any other provision of the Plan, the Company or any Subsidiary has an absolute and unrestricted right to terminate a consultant's service at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in writing.

(b) "***Termination of Directorship***" shall mean the time when Participant, if he or she is or becomes a non-employee director of the Board, ceases to be a director for any reason, including, but not by way of limitation, a termination by resignation, failure to be elected, death or retirement. The Board, in its sole and absolute discretion, shall determine the effect of all matters and questions relating to Termination of Directorship with respect to non-employee directors.

(c) "***Termination of Employment***" shall mean the time when the employee-employer relationship between Participant and the Company or any Subsidiary is terminated for any reason, with or without cause, including, but not by way of limitation, a termination by resignation, discharge, death, disability or retirement; but excluding: (a) terminations where there is a simultaneous reemployment or continuing employment of Participant by the Company or any Subsidiary, and (b) terminations where there is a simultaneous establishment of a consulting relationship or continuing consulting relationship between Participant and the Company or any Subsidiary. The Plan Administrator, in its absolute discretion, shall determine the effect of all matters and questions relating to Termination of Employment, including, but not by way of limitation, the question of whether a particular leave of absence constitutes a Termination of Employment.

(d) "***Termination of Services***" shall mean Participant's Termination of Consultancy, Termination of Directorship or Termination of Employment, as applicable.

1.2 General. Each Performance Stock Unit represents the right to receive a number of Shares determined in accordance with Exhibit A if and when it vests. The Performance Stock Units shall not be treated as property or as a trust fund of any kind.

1.3 Incorporation of Terms of Plan. PSUs are subject to the terms and conditions of the Plan which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II

GRANT OF PERFORMANCE STOCK UNITS

2.1 Grant of PSUs. In consideration of your continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the Grant Date set forth in the Notice of Grant (the "***Grant Date***"), the Company granted to you the number of PSUs set forth in the Notice of Grant.

2.2 Company's Obligation to Pay. Subject to and until the PSUs will have vested in the manner set forth in Article II hereof, you will have no right to payment of any such PSUs.

Prior to actual payment of any vested PSUs, such PSUs will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

2.3 Vesting Schedule. Subject to Sections 2.4 and 3.12, your PSUs will vest and become nonforfeitable according to the vesting schedule set forth in the Notice of Grant as long as you have not had a Termination of Services prior to the applicable Vesting Date. Unless otherwise determined by the Plan Administrator, employment or service for a portion, even a substantial portion, of the vesting period will not entitle you to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a Termination of Services as provided in Section 2.5 below or under the Plan.

2.4 Change in Control Treatment. In the event of a Change in Control prior to the end of any Performance Period (as defined in Exhibit A), each Performance Period then in effect shall be shortened to end at such date within ten (10) days prior to the closing of the Change in Control as determined by the Plan Administrator, the Achievement Factor for each such Performance Period shall be calculated on a date occurring prior to the closing of the Change in Control, as determined by the Plan Administrator, in its sole discretion, and such Performance Stock Units will vest on the Vesting Date following the originally scheduled Performance Period related to such Performance Stock Units, with the number of Shares to be issued upon such vesting determined using the Achievement Factor calculated in accordance with this Section 2.4, subject, in each case, to you not experiencing a Termination of Services prior to the applicable Vesting Date. For the avoidance of doubt, the Performance Stock Units shall be subject to any accelerated vesting applicable to such Performance Stock Units under any change in control plan you participate in or any change in control agreement you are party to, in each case, in accordance with the terms thereof and using the Achievement Factor determined in accordance with this Section 2.4.

2.5 Forfeiture, Termination and Cancellation upon Termination of Services. Upon your Termination of Services prior to a Vesting Date for any or no reason, the PSUs subject to such Performance Period will be automatically forfeited, terminated and cancelled as of the applicable termination date without payment of any consideration by the Company, and you, or your beneficiary or personal representative, as the case may be, shall have no further rights hereunder. In addition, any PSUs that do not vest in accordance with the Notice of Grant and Exhibit A will be automatically forfeited, terminated and cancelled as of the Determination Date applicable to such PSUs without payment of any consideration by the Company, and you, or your beneficiary or personal representative, as the case may be, shall have no further rights hereunder.

2.6 Payment after Vesting.

(a) On or before the tenth (10^{th}) day following the later of (i) the Determination Date or (ii) the Vesting Date for each Performance Period, the Company shall deliver to the Participant that number of Shares, if any, issuable in respect of such Performance Period, as determined in accordance with the Notice of Grant. Notwithstanding the foregoing, in the event Shares cannot be issued because of the failure to meet one or more of the conditions set forth in Section 2.8(a), (b) or (c) hereof, then the Shares shall be issued pursuant to the preceding sentence

as soon as administratively practicable after the Plan Administrator determines that Shares can again be issued in accordance with Sections 2.8(a), (b) and (c) hereof. Notwithstanding any discretion in the Plan, the Notice of Grant or this Agreement to the contrary, upon vesting of the PSUs, Shares will be issued, if at all, as set forth in this section. In no event will the PSUs be settled in cash.

(b) Notwithstanding anything to the contrary in this Agreement or the agreements evidencing any Prior Awards, the Company shall be entitled to require you to pay any sums required by applicable law to be withheld with respect to the PSUs, the issuance of Shares or with respect to any Prior Awards. Such payment shall be made in such form of consideration as determined by the Company in its sole discretion, including:

(i) Cash or check;

(ii) Surrender or withholding of Shares otherwise issuable under the PSUs or Prior Awards, as applicable, and having an aggregate fair market value on the date of delivery sufficient to meet the withholding obligation, as determined by the Company in its sole discretion;

(iii) Other property acceptable to the Company in its sole discretion (including cash resulting from a transaction (a "***Sell to Cover***") in which the Company, on your behalf, instructs Fidelity Stock Plan Services, LLC or one of its affiliates or another agent selected by the Company (collectively, the "***Agent***") to sell a number of Shares issued to you sufficient to meet the withholding obligation, as determined by the Company in its sole discretion, and to remit proceeds of such sale to the Company sufficient to satisfy the withholding obligation); or

(iv) By deduction from other compensation payable to you.

If the Company requires or permits a Sell to Cover:

(A) You hereby appoint the Agent as your agent and direct the Agent to (1) sell on the open market at the then prevailing market price(s), on your behalf, promptly after any PSUs (or Prior Awards) vest, such number of the Shares that are issued in respect of such PSUs (or subject to or issued in respect of such Prior Awards) as the Agent determines will generate sufficient proceeds to cover (x) any estimated tax, social insurance, payroll, fringe benefit or similar withholding obligations with respect to such vesting and (y) all applicable fees and commissions due to, or required to be collected by, the Agent with respect thereto and (2) in the Company's discretion, apply any remaining funds to your federal tax withholding or remit such remaining funds to you.

(B) You hereby authorize the Company and the Agent to cooperate and communicate with one another to determine the number of Shares to be sold pursuant to subsection (A) above. You understand that to protect against declines in the market price of Shares, the Agent may determine to sell more than the minimum number of Shares needed to generate the required funds.

(C) You understand that the Agent may effect sales as provided in subsection (A) above in one or more sales and that the average price for executions resulting from bunched orders will be assigned to your account. In addition, you acknowledge that it may not be possible to sell Shares as provided in subsection (A) above due to (1) a legal or contractual restriction applicable to the Agent, (2) a market disruption, or (3) rules governing order execution priority on the national exchange where the Shares may be traded. In the event of the Agent's inability to sell Shares, you will continue to be responsible for the timely payment to the Company and/or its affiliates of all federal, state, local and foreign taxes that are required by applicable laws and regulations to be withheld, including but not limited to those amounts specified in subsection (A) above.

(D) You acknowledge that, regardless of any other term or condition of this Section 2.6(b), neither the Company nor the Agent will have any liability to you for (1) special, indirect, punitive, exemplary, or consequential damages, or incidental losses or damages of any kind, (2) any failure to perform or for any delay in performance that results from a cause or circumstance that is beyond its reasonable control, or (3) any claim relating to the timing of any Sell to Cover, the price at which Shares are sold in any Sell to Cover, or the timing of the delivery to you of any Shares following any Sell to Cover. Regardless of the Company's or any Subsidiary's actions in connection with tax withholding pursuant to this Agreement, you acknowledge that the ultimate responsibility for any and all tax-related items imposed on you in connection with any aspect of the PSUs (and any Prior Awards) and any Shares issued upon vesting of the PSUs (or subject to or issued in respect of your Prior Awards) is and remains your responsibility and liability. Except as expressly stated herein, neither the Company nor any Subsidiary makes any commitment to structure the PSUs (or any Prior Award) to reduce or eliminate your liability for tax-related items.

(E) You hereby agree to execute and deliver to the Agent any other agreements or documents as the Agent reasonably deems necessary or appropriate to carry out the purposes and intent of this Section 2.6(b). The Agent is a third-party beneficiary of this Section 2.6(b).

This Section 2.6(b) shall survive termination of this Agreement until all tax withholding obligations arising in connection with this Award have been satisfied.

The Company shall not be obligated to deliver any Shares to you unless and until you have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes required to be withheld in connection with the grant, vesting or settlement of the PSUs.

2.7 Rights as Stockholder. As a holder of PSUs you are not, and do not have any of the rights or privileges of, a stockholder of the Company, including, without limitation, any dividend rights or voting rights, in respect of the PSUs and any Shares issuable upon vesting or settlement thereof unless and until such Shares shall have been actually issued by the Company to you. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section II.A of Article Three of the Plan.

2.8 Conditions to Delivery of Shares. Subject to Section VI of Article Five of the Plan, the Shares deliverable hereunder, or any portion thereof, may be either previously authorized but unissued Shares or issued Shares which have then been reacquired by the Company. Such Shares shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any Shares deliverable hereunder prior to fulfillment of all of the following conditions:

(a) The admission of such Shares to listing on all stock exchanges on which the Shares are then listed;

(b) The completion of any registration or other qualification of such Shares under any state, federal or foreign law or under rulings or regulations of the Securities and Exchange Commission or of any other governmental regulatory body, which the Plan Administrator shall, in its absolute discretion, deem necessary or advisable;

(c) The obtaining of any approval or other clearance from any state, federal or foreign governmental agency which the Plan Administrator shall, in its absolute discretion, determine to be necessary or advisable;

(d) The receipt by the Company of full payment for such Shares, including payment of any applicable withholding tax, which may be in one or more of the forms of consideration permitted under Section 2.6 hereof; and

(e) The lapse of such reasonable period of time following a Vesting Date as the Plan Administrator may from time to time establish for reasons of administrative convenience.

ARTICLE III

OTHER PROVISIONS

3.1 Administration. The Plan Administrator shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Plan Administrator in good faith shall be final and binding upon you, the Company and all other interested persons. No member of the Plan Administrator or the Board shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan, this Agreement or the PSUs.

3.2 Adjustments Upon Specified Events. In addition, upon the occurrence of certain events relating to the Shares contemplated by Section V.E of Article One and Section II of Article Three of the Plan (including, without limitation, an extraordinary cash dividend on such Shares), the Plan Administrator shall make such adjustments as the Plan Administrator deems appropriate

in the number of Performance Stock Units then outstanding and the number and kind of securities that may be issued in respect of the Performance Stock Units. You acknowledge that the PSUs are subject to modification and termination in certain events as provided in this Agreement and Articles One and Three of the Plan.

3.3 Grant is Not Transferable. Your PSUs may not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and will not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of the PSUs, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, the PSUs will terminate immediately and will become null and void.

3.4 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Participant shall be addressed to Participant at the Participant's last address reflected on the Company's records, including any email address. By a notice given pursuant to this Section 3.4, either party may hereafter designate a different address for notices to be given to that party. Any notice to the Company shall be deemed given when actually received. Any notice given by the Company shall be deemed given when sent via email or 5 U.S. business days after mailing.

3.5 Titles. Titles provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

3.6 Governing Law; Severability. The laws of the State of California shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

3.7 Conformity to Securities Laws. You acknowledge that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended (the "***Exchange Act***") and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state and foreign securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the PSUs are granted, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

3.8 Amendments, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Plan Administrator or the Board, *provided,* that, except as may otherwise be provided by the Plan, no amendment, modification, suspension

or termination of this Agreement shall adversely affect the PSUs in any material way without your prior written consent.

3.9 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth in Section 3.3 hereof, this Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

3.10 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if you are subject to Section 16 of the Exchange Act, the Plan, the PSUs and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by and necessary to comply with applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

3.11 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall be interpreted as forming an employment or service contract with the Company or any Parent or Subsidiary or as conferring upon you any right to continue to serve as an employee or other service provider of the Company or any of its Subsidiaries.

3.12 Dispute Resolution. By accepting the PSUs, if you are an employee providing services in the U.S., you agree to the provisions of, and to be bound by, the Broadcom Inc. Employment Arbitration Agreement attached as Exhibit C hereto (the "***Arbitration Agreement***"). In the event you violate the Arbitration Agreement, any unvested PSUs will thereupon be cancelled for no consideration.

3.13 Entire Agreement. The Plan, the Notice of Grant and this Agreement constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

3.14 Section 409A. The PSUs are not intended to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, "***Section 409A***"). However, notwithstanding any other provision of the Plan or this Agreement, if at any time the Plan Administrator determines that the PSUs (or any portion thereof) may be subject to Section 409A, the Plan Administrator shall have the right in its sole discretion (without any obligation to do so or to indemnify you or any other person for failure to do so) to adopt such amendments to the Plan or this Agreement or adopt other policies and procedures (including

amendments, policies and procedures with retroactive effect), or take any other actions, as the Plan Administrator determines are necessary or appropriate either for the PSUs to be exempt from the application of Section 409A or to comply with the requirements of Section 409A.

3.15 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. Neither the Plan nor any underlying program, in and of itself, has any assets. The Participant shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the PSUs, and rights no greater than the right to receive the Shares as a general unsecured creditor with respect to PSUs, as and when payable hereunder.

3.16 Additional Terms for Participants Providing Services Outside the United States. To the extent you provide services to the Company or a Subsidiary in a country other than the United States, the PSUs shall be subject to such additional or substitute terms as shall be set forth for such country in Exhibit B attached hereto. If you relocate to one of the countries included in Exhibit B during the life of the PSUs, Exhibit B, including the provisions for such country, shall apply to you and the PSUs, to the extent the Company determines that the application of such provisions is necessary or advisable in order to comply with applicable law or facilitate the administration of the Plan. In addition, the Company reserves the right to impose other requirements on the PSUs and the Shares issued upon vesting of the PSUs, to the extent the Company determines it is necessary or advisable in order to comply with local laws or facilitate the administration of the Plan, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

* * * * *

EXHIBIT A
TO BROADCOM CORPORATION
2012 STOCK INCENTIVE PLAN
PERFORMANCE STOCK UNIT AWARD AGREEMENT

PERFORMANCE CRITERIA AND MEASUREMENT

1. Definitions.

For the purposes of the charts, calculations and conditions below:

a. "***Average Market Value***," with respect to a company, shall mean the average closing trading price of a company's shares on the principal exchange on which such shares are then traded, during the 30 consecutive calendar days ending on (and including) a specified date, as reported by the applicable principal exchange on which such company's shares are listed or quoted, or by such other authoritative source as the Plan Administrator may determine.

b. "***Prior Achievement Sum***" means the sum of the Achievement Factors (as defined below) for Performance Period 1, Performance Period 2 and Performance Period 3.

c. "***Relative TSR***" shall mean the Company's TSR relative to the TSR of the companies that comprise the S&P 500 Index as of the last day of the Performance Period, expressed as a percentile.

d. ***"TSR***" means the compound annual total stockholder return of the Company (or of a company in the S&P 500 Index, as applicable), as measured by the change in the price of a Share (or the publicly traded securities of a company in the S&P 500 Index, as applicable) over the Performance Period (positive or negative), calculated based on the Average Market Value on the first day of the Performance Period as the beginning share price, and the Average Market Value on the last day of the Performance Period as the ending share price, and assuming dividends (if any) are reinvested based on the price of a Share (or the publicly traded securities of a company in the S&P 500 Index, as applicable) in accordance with the "gross" or "total" return methodology as defined by S&P Dow Jones.

2. Performance Periods. There shall be four performance periods (each, a "***Performance Period***") as follows: March 2 on or immediately preceding the Grant Date (the "***Performance Period Commencement Date***") through March 1 of the first calendar year following the Performance Period Commencement Date ("***Performance Period 1***"), the Performance Period Commencement Date through March 1 of the second calendar year

following the Performance Period Commencement Date ("***Performance Period 2***"), the Performance Period Commencement Date through the March 1 of the third calendar year following the Performance Period Commencement Date ("***Performance Period 3***") and the Performance Period Commencement Date through March 1 of the fourth calendar year following the Performance Period Commencement Date ("***Performance Period 4***").

3. Achievement Factor. As soon as administratively practicable, and in any event within 60 days, following the end of each Performance Period, the Plan Administrator shall determine the Relative TSR for such Performance Period and calculate the Achievement Factor (such date of determination, the "***Determination Date***"). For the purposes hereof, "***Achievement Factor***" shall mean that factor determined under the applicable table below.

Relative TSR **Performance Periods 1, 2 and 3**	**Achievement Factor**
Below the 25th percentile of the S&P 500	0
At the 25th percentile of the S&P 500	0.50
At or above the 50th percentile of the S&P 500	1

Relative TSR **Performance Period 4**	**Achievement Factor**
Below the 25th percentile of the S&P 500	0
At the 25th percentile of the S&P 500	Prior Achievement Sum greater than or equal to 1.5 = 0.5. Prior Achievement Sum less than 1.5 = 2 less the Prior Achievement Sum.
At the 50th percentile of the S&P 500	4 less the Prior Achievement Sum.
At or above the 75th percentile of the S&P 500	Absolute TSR Negative = 4 less the Prior Achievement Sum. Absolute TSR Neutral or Positive = 8 less the Prior Achievement Sum.

If the Relative TSR achieved during the applicable Performance Period is between two of the levels set forth in the tables above, the Achievement Factor shall be determined using linear interpolation. For the avoidance of doubt, the Shares issuable in respect of the PSUs shall in no event exceed two times the number of PSUs shown in the Notice of Grant, and in the event the Relative TSR for the Performance Period is less than the 25th percentile, the Achievement Factor shall be 0 (i.e., no linear interpolation between the two lowest Relative TSR achievement levels set forth in the tables above). If our absolute TSR is negative for Performance Period 4, then the maximum number of Shares issuable in respect of the PSUs is 100% of the number of PSUs shown in the Notice of Grant.

EXHIBIT B
TO BROADCOM CORPORATION
2012 STOCK INCENTIVE PLAN
PERFORMANCE STOCK UNIT AWARD AGREEMENT

This Exhibit B includes (i) additional terms and conditions applicable to all Participants providing services to the Company or a Subsidiary outside the United States, and (ii) additional terms applicable to Participants providing services to the Company or a Subsidiary in the countries identified below.

EXHIBIT C

BROADCOM INC. EMPLOYMENT ARBITRATION AGREEMENT

Broadcom Inc. – List of Significant Subsidiaries

As of November 3, 2019

Name of Subsidiary	**Country of Incorporation**
Avago Technologies Cayman Ltd.	Cayman Islands
Avago Technologies International Sales Pte. Limited	Singapore
Avago Technologies Japan, Ltd.	Japan
Avago Technologies Wireless (U.S.A.) Manufacturing LLC	Delaware (U.S.A.)
Avago Technologies U.S. Inc.	Delaware (U.S.A.)
Broadcom Bermuda LP	Bermuda
Broadcom Corporation	California (U.S.A.)
Broadcom International Limited	Cayman Islands
Broadcom Technologies, Inc.	Delaware (U.S.A.)
Brocade Communications Systems, LLC	Delaware (U.S.A.)
CA, Inc.	Delaware (U.S.A.)
CA Europe Sárl	Switzerland
LSI Corporation	Delaware (U.S.A.)
ServerWorks International Ltd.	Cayman Islands

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-221654-01, 333-215291-01, 333-209331-01 and 333-228175) and Form S-3 (No. 333-225648) of Broadcom Inc. of our report dated December 19, 2019 relating to the financial statements and financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
San Jose, California
December 20, 2019

EXHIBIT 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Hock E. Tan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Broadcom Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 20, 2019

/s/ Hock E. Tan

Hock E. Tan
Chief Executive Officer

EXHIBIT 31.2

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Thomas H. Krause, Jr., certify that:

1. I have reviewed this Annual Report on Form 10-K of Broadcom Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 20, 2019

/s/ Thomas H. Krause, Jr.

Thomas H. Krause, Jr.
Chief Financial Officer and Principal Financial Officer

EXHIBIT 32.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Broadcom Inc. (the “Company”) for the fiscal year ended November 3, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, Hock E. Tan, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: December 20, 2019

/s/ Hock E. Tan

Hock E. Tan
Chief Executive Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

EXHIBIT 32.2

CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Broadcom Inc. (the "Company") for the fiscal year ended November 3, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Thomas H. Krause, Jr., Chief Financial Officer and Principal Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: December 20, 2019

/s/ Thomas H. Krause, Jr.

Thomas H. Krause, Jr.
Chief Financial Officer and Principal Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.